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JOURNAL

Volume 40, No. 3

Fall 1991

At the moment of writing, it is only three weeks until the 1991 National QCWA Convention will get under way. It is going to be a really active convention. Canton Ohio Chapter 21 has been planning the event for more than a year, and there will be some surprises for all. We are hoping that attendance will be large and if pre-registration means anything, it will be a good meeting.

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QCWA ON THE AIR MEETING

SSB, Every Sunday Afternoon

2000 GMT, 14347 kHz

CW each Wednesday Evening

8:00 PM Eastern time, 7035 kHz

W5QU / W4PI

QUARTER CENTURY WIRELESS ASSOCIATION, INC.
1409 Cooper Dr., Irving, TX 75061-5527

QUARTER CENTURY WIRELESS ASSOCIATION, INC.

HONOR AWARDS

QCWA HALL OF FAME

1980	Mr. Ray Meyers, W6MLZ
1981	Mr. Bill Halligan, W9AC
1982	Mr. Barry Goldwater, K7UGA
1983	Mr. Jean-B. Wolff, LX1JW
1984	Mr. Don Wallace, W6AM
1986	Mr. George Sterling, W1AE
1987	Mr. Victor Clark, W4KFC
1991	Mr. Richard Baldwin, W1RU
	Mr. Leo Meyerson, W0GFQ

DISTINGUISHED SERVICE AWARD

1975	Mr. A. L. Walsh, W2BW
1979	Mr. Mark Devaney, K4IDC
1988	Mr. David Talley, W2PF
1989	Mr. Hugh Turnbull, W3ABC
	Mr. Fred Hammond, VE3HC
1990	Mr. Herb Gleed, W6FQ
1991	Esther Given, W6BDE

MEMBER OF THE YEAR AWARD

1979	Mr. Ed Trombley, W8CAM
1981	Mr. Lew Sieck, K4NE
1982	Mr. Herb Gleed, W6FQ
1984	Mr. Bert Gunn, W5FU

ROLL OF HONOR AWARD

1981	Mr. John DiBlasi, W2FX
	Mr. Gus Gironda, W2JE
1985	Mr. Bud Waite, W2ZK
1986	Mr. Earl Thomas, W2MM
	Mr. Ralph Barber, W2ZM
1987	Ms. Ethel Smith, K4LMB
1989	Mr. Leland Smith, W5KL

JOHN Di BLASI AWARD

1984	Mr. Hal Sears, W5NC
1986	Mr. Owen Garriott, W5LFL
1988	Mr. Clarence Seid, W2KW
1989	Mr. Frank Lester, W4AMJ
	Mr. Ralph Hasslinger, W2CVF
	Mr. Irving Groves, K4HT
	Mr. Nat Burnett, K4OL
	Mr. Moe Joffe, W6PHE
	Mr. Robert Baird, W9NN

PRESIDENTIAL AWARD

1988	Mr. John D. Kraus, W8JK
	Mr. Byron H. Goodman, W1DX
	Mr. H. H. Beverage, 2BML
1989	Mr. John Huntoon, W1RW
	Mr. Stewart S. Perry, W1BB
	Mr. M. Walter Maxwell, W2DU
1990	Mr. Bruce L. Kelley, W2ICE
1991	Mr. Armin Meyer, W3ACE
	Mr. Dave Bell, W6AQ
	Mr. Noel Eaton, VE3CJ
1991	Mr. Ed Tilton, W1HDQ

THOSE WHO HAVE SERVED

PAST PRESIDENTS

John DiBlasi, W2FX*	1947 - 1964
Earl R Thomas, W2MM*	1965 - 1968
Clarence Seid, W2KW	1969 - 1971
Barry Goldwater, K7UGA	1972 - 1973
Frank A. Gunther, W2ALS	1974 - 1977
Harry S Gartsman, W6ATC	1978 - 1981
Stuart Meyers, W2GHK	1982 - 1985
Leland Smith, W5KL	1986 - 1989

EXECUTIVE SECRETARY/GENERAL MANAGER

Ralph Barber, W2ZM*	1955 - 1964
Gus Gironda, W2JE	1965 - 1973
Ethel Smith, K4LMB	1974 - 1976

*Silent Key

The President's Message

The 1991 elections for QCWA officers and directors has been completed and the results are in. You can look at the masthead and note that there have been a few changes. We have a new vice-president, Lew McCoy, W1ICP, who takes over the shoes of departing Vice President, Hugh Winter, W5HD, whose contributions to the organization have been outstanding.

We have three "new" names among the directors of the Board. They are really not "new" to many of you who will recognize the return to activity of form QCWA president, Harry Gartsman, W6ATC, and former QCWA director, Art Miligan, W8KW. The third of the trio is well-known Bill Stevens, W6ZM, a former director of the ARRL. A hearty welcome to all of those elected and thanks to you from those of us returned to office, W2HD as president, W4HU as secretary, W4COW as treasurer and directors W3WPY and W4ZC.

Let's take a look at the QCWA Board of Directors, consisting of the four elected officers and ten directors. All members of the Board serve without monetary compensation. There is a modest sum allotted to each member of the Board for telephone and postal reimbursement. Additionally, members are reimbursed for lodging at the time of the twice annual meetings, one held in Texas in April and the second at the site of the QCWA National Convention. All other expenses are "out of pocket" for members of the Board.

Officers and directors must cover the expense of all transportation to and from the two Board meetings, including the costs for overnight lodging and meals enroute. They must also pay out of their own personal funds for every meeting, convention, hamfest or whatever activity they are requested to attend. The modest sums mentioned earlier would barely cover a single night's lodging and a cup of coffee.

It seems appropriate to bring up these points in light of recent letters which indicate a growing feeling that area representation is still very desirable. Yes, it would be just great if budgetary limitations could be removed and trips could be "ordered" to all points of the compass and chapters could have the pleasure of the frequent attendance of an officer or director at their meetings. However, that's just not possible within the present framework of our organization.

Personally, it seems to this writer that we are indeed fortunate that so many are willing to serve and devote so much of their own time and resources to QCWA. If we attempt to satisfy those who wish to have area representation, there is the very good chance that no candidates might be found in certain areas. This is not to say that we should abandon the idea of such representation, but we should understand the conditions imposed on candidates.

Overshadowing this entire picture is the success story of so many of our chapters and their endeavors. May I personally extend my thanks and appreciation to the volunteers who serve as Chapter leaders . . . officers and committee members . . . without whom the QCWA, or anyother organization so conceived, would never exist today. Also, let us all remember the service of those who have already passed this way and provided the leadership so necessary for the survival of our successful organization.

For some, this type of activity is an "ego trip" For others it represents satisfaction in having the opportunity to see progress and help others further enjoy Amateur Radio in all its many, many facets. Whatever the reason, we're indeed fortunate to have such people ready and willing to serve. BCNU and 73 . . .

73, Harry, W2HD

1991-1992 QCWA OFFICERS & DIRECTORS

Harry Dannals, W2HD, President	804 974 7388
1800 Bentlvar Dr, Charlottesville, VA 22901-8229	
Lew McCoy, W1ICP, Vice President	505 388 4862
200 W Idaho St, Silver City, NM 87110-3624	
John Swafford, W4HU, Secretary	703 536 9537
2025 Kensington St, Arlington, VA 22205-3209	
Wesley Randles, W4COW, Treasurer	603 446 3492
HCR 32, Box 591, Stoddard, NH 03464	
Milton E. Chaffee, W1EFW	203 628 2750
28 Ruessner Rd, Southington, CT 06489-3310	
Lew McCoy, W1ICP, Director	505 388 4862
200 W Idaho St, Silver City, NM 88061-3624	
Walter L. Brink, W3WPY, Director	301 643 2933
919 Cloverfields Dr, Stevensville, MD 21666-9397	
Jack Kelleher, W4ZC, Director	301 924 1605
612 Ednor Rd, Silver Spring, MD 20905-5012	
El Charlton, W5MD, Director	504 275 5744
1533 Outrigger Dr, Baton Rouge, LA 70816	
Harry Gartsman, W6ATC, Director	213 276 5934
9921 Sunset Blvd, Hollywood, CA 90218	
Robert G Rickey, NF6P, Director	714 982 0348
8532 Red Hill Dr, Cucamonga, CA 91783	
Bill Stevens, W6ZM, Director	408 371 3819
1074 Foxworthy Ave, San Jose, CA 95124	
Jim Walsh, W7LVN, Director	503 344 3321
159 E 16 th St, Eugene, OR 97401	
Art Miligan, W8KW	813 474 4129
2120 W Crest Dr, Englewood, FL 34223	



1991 ELECTION RETURNS

The official tally of votes cast for candidates standing for election in 1991 are as follows:

For President: Harry Dannals, W2HD	4151*
Write in candidates	80
For Vice President: Lew McCoy, W1ICP	2816*
Arthur Kay, W5APX	1578
For Secretary: John Swafford, W4HU	3941*
Write ins	4
For Treasurer: Wes Randles, W4COW	2354*
John Lindell, W0YCY	2058
For Director: Jack Kelleher, W4ZC	3438*
Walter Brink, W3WPY	2811*
Art Miligan, W8KW	2796*
Bill Stevens, W6ZM	2547*
Harry Gartsman, W6ATC	2523*
John Wondergem, K5KR	2476
Robert Ray, W5ZMI	2245
John Weber, KA2IXW	2231

*Elected to office, term beginning September 1, 1991. Congratulations to all candidates, and thank you for taking part in the QCWA election.

The Tellers for the election were members of Palmetto State Chapter 89, who carried out both a conventional and computer assisted tally of the balloting. Thanks go to Palmetto State Chapter and its members for their work and cooperation.

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the State of New York as a not-for-profit organization.

1992 Nominating Committee Reports

"In conformation with the By-Laws of the Quarter Century Wireless Association the 1992 Nominating Committee, appointed to solicity a slate of nominees for the 1992 Directorship election, submits the following list of candidates for approval by the QCWA Board of Directors:

- * Milton E. Chaffee, W1EFW
27 Ruessner Rd, Southington, CT 06489
- * El Charlton, W5MD
1533 Outrigger Dr, Baton Rouge, LA 70816
- Arch Doty, K8CFU
347 Jackson Rd, Fletcher, NC 28732
- Lawrence Higgins, W5QMU
2522 Old Hickory Trail, San Antonio, TX 78230
- John E. Lindell, W0YCY
8200 Highway 69, Suite 409, Port Arthur, TX 77640
- * Robert B. Rickey, NF6P
8532 Red Hill Dr, Cucamonga, CA 91730
- Jack G. Troster, W6ISQ
82 Belbrook Way, Atherton, CA 94025
- * James Walsh, W7LVN
159 E 16th St, Eugene, OR 97401
- John Weber, KA2IXW
142 Greene St, New York City, NY 10012
- John Wondergem, K5KR
600 Smith Dr, Metairie, LA 70005

(*) Indicates incumbent

Respectfully,

Claude Feigley, W3ATQ
The 1991 QCWA Nominating Chairman and members:

John Huntoon, W1RW, John W. McQueen, KL7AVX
Joseph J. Schroeder, W9JUV
Raymond B. Wangler, W5EDZ

Candidates may be nominated by petition by the signatures of at least 25 members in good standing. Such petitions must be in the hands of the Secretary of QCWA by December 31, 1991.

More on retirement center operation

I'm figuring on sending CQ and working DX until the Old Man shuts down my power plant. An article on p56 of the summer edition of the Journal asked for comments on methods and means for operating a transmitter by remote control from a rest home. The article also discussed chapters providing a remote controlled transmitter for its members use. We received two comments. One from Chuck, K2WW and from Al, W4DJ. At Chuck's location in Arizona he finds it satisfying to use the car as a mount for a hustler mobile antenna, running about 50 feet of coax to the transceiver. He says it works good and he has fun with it. Al, W4DJ did some shopping around before entering a retirement home. When he brought up the subject of operating a ham station comments were vague, such as "maybe" or, we'll consider it." He suggests getting a written agreement out of a retirement center before signing a contract. He did, and it works fine. He agrees that a remote control unit would work fine but thinks each one should try for his own operation first. In his case he has no TVI trouble at all.

Lets have more such information and especially, we'd like info on a remote unit such as a radio club might use. We'd like a solution that doesn't require RF around the control point. Give it some thought and remember that not all members might be able to afford a complete system for themselves. We are thinking that it would be well for QCWA to set up remote controlled transmitters at schools furnishing a service to members, and at the same time giving kids apparatus who might not be able to afford it otherwise. Retired QCWA members ought to be good teachers for courses in amateur radio. Let us hear from you - you know the ole saying... if you don't use it you'll lose it.

Ole Gus, W5KM

4515 Prentice St #205, Dallas, TX 75206

COMMENTS ON THE QSL CARDS:

Last month a copy of the proposed QCWA QSL card was sent to Chapter officials so they could be aware of its general appearance, and to be able to show it to members of the Chapters. We have received some comments. We have edited them for brevity, but have retained the intent of comments expressed:

Jack Sanderson, K1NDC (112) The material on the back and front of the cards appears to be the same. Bolder type would be desirable. States should be spelled out. Add USA for the DXers.

Insert square for stamp on address side. General design is dignified and attractive.

Ralph Cabanillas, Jr., W6IL (7) The QCWA logo is subdued and the data over it detracts from the appearance as well as duplicates the material on the back of the card. I would suggest doing away with the QSO blocks entirely and printing the logo in bright bold red to give it impact. Also, QCWA No. 99,999 could be moved to the left to allow room on the same line for "licensed since 1930".

DECREMENT SPOOF!

That decrement spoof write up woke up quite a few of the old Spark Set - quite a few letters came in that were most welcome:

"I thought you might like the enclosed for your nostalgia file. because I know there are a lot of your Old-Time pals scrawled on it. Some really big names too. Leon Deloy, F8AB; Irv Vermilya, 1HAA, Matty, 9ZN and many more. I came up to Chicago for the event from Dayton with two other young punks and had a ball at the old Edgewater Beach Hotel. Everybody sent code on the steam radiator pipes from room to room. Saw my first night club show at the old Rainbow Gardens starring "No, No, Nora." All of we young yokels fell in love with her! (For those who haven't already guessed, W9NN Sent a copy of his program for the 2nd National ARRL Convention, September 11-15, 1923 - a program liberally endorsed by great names in Amateur radio then, and in the future.

"By the way, I have a panorama view picture of the group taken outside the hotel. It's 10 x 29 inches, and glued to heavy cardboard. Pretty brittle, but possibly reproducible if enough members would like to see it published. But, then maybe you and I are the only ones that live in the past...yes?"

Bob Baird, W9NN
PO Box 498
Plover, WI 54467

ANNOUNCEMENT: HQ, in cooperation with Ralph Cabanillas, Jr., W6IL, is preparing a roster of all Officers/Directors from 1947 to date. When complete, it may be deemed worthy of publication.

ON AIR SCHEDULES - CHAPTER INDEX

SCHEDULED ON THE AIR MEETINGS

1	Cleveland Chapter	Wed	2400Z	W8OXA	146.88
2	Chicago Area	1Th	2100L	W9MOL	147.15
4	Northwest Chapter	Sun	1630Z	W7PN	3655
		Sun	2000Z	W7FNC	3952
		Sun	2300Z	W7AZI	3952
5	Delaware Valley	Sun	1445Z	W2HX	3917
6	Pittsburgh	Sun	1330Z	W8CSU	147.63
		Sun	1400		
7	Southern California	Sun	0900L	W6FQ	3917
		Sun	1100L	K6BA	3695
		Sun	1000L	W6ZRZ	146.805
8	Upper Midwest	Sat	0800L	W0KHG	3880
9	Dayton/Cincinnati	Sun	1800Z	W8DWT	3987
10	Michigan	Sun	1200Z	- V -	3903
11	Northern California	Sun	0930L	WA6AFT	3907
		Sat	1000L	W6HHN	146.25
14	San Diego	Wed	0400Z	K6QM	145.52
15	Tulsa	Sun	0645L	W5FUR	3830
		Sun	0930L	W5DFU	7157
16	Arizona	Sun	0800L	W7ER	3890
20	Baltimore	Mon	2100Z	W3EE	147.28
21	Canton, OH	Wed	0130Z	W8OYV	147.42
25	Nebraska	Sat	0830L	W0EUT	3982
27	Houston	Thu	2000L	W5CCD	3866.5
28	Central New York	Sun	1030L	V	3917
31	Reading, PA	Mon	0100L		146.91
32	Gator	Sat	0900L	W4OIN	125.29
33	Gunderson-Penn-Jersey	Daily	2000L	W3TI	3982
35	Mid-Continent	Thu	2030L	W0WHK	146.37
36	Northwest Indiana	Wed	0100Z	W9NGB	145.45
38	San Antonio	Sun	2030L	N5EN	28650
41	Dallas	Sun	0715L	V	3835
44	Nevada	Mon	2000L	W9RU	145.39
45	Citrus	Tue	1930L	W4BKC	147.225
46	Founders'	Sun	1615Z	W2DP	3917
		Thu	2030L	W2DP	148.360
48	Treasure Coast	Dly	1500Z		7153
49	Atlanta, GA	Sat	0900L	K4VN	3855
54	Tyler Texas	Sun	1300Z	W5CNO	3835
55	Wisconsin	Sun	1430Z		3985
58	Colorado	Sun	0930L	V	146.070
		Sun	0900	W0WSK	3905
60	East Tennessee	Sun	0900L	AA4WX	7233
61	Detroit Metro	Sun	0800L	W8HIX	3663
62	Suwannee	Sat	0900L	K4BRC	3940
63	Central Oklahoma	Sun	1400Z	V	3855
64	El Paso	Sat	1530Z	V	3933
65	Niagara Frontier	Sun	1330L	W2SD	3900
73	Southern Ontario	Sun	0900L	VE3AGS	3773
		Sun	1300L	VE3MO	7088
75	Central California Coast	Sat	0830L		3917
76	Blue Ridge Chapter	Sat	1300L		7180
77	Northern New Jersey	Sun	1800Z	W2OJW	3917
		Fri	0100Z		147.285
79	Sunflower Chapter	Wed	2100L		146.79
81	Long Island Chapter	Sun	1130Z	W2AMI	3917
		Fri	2030L	W2DX	147.33
84	Florida	Mon	0130L	KF4BU	146.28
85	Ark-La-Tex	Mon	0100Z	K5LFJ	146.67
87	Evergreen	Sun	1500Z		3985
89	Palmetto State	Sat	0900L	W4EGH	3927
		Sun	1700L	N4LS	3695
90	Razorback	Sun	1300L	W5MYZ	7230
92	Northern Lights	Sat	2000Z		29000
96	Gateway	Sat	1600Z	W2KGI	3933
102	Dakota	Sun	1400Z	W0HOJ	3890
104	Treasure State	Sat	1700Z		3938
106	German	Mon	1700Z	DL9AR	3663
		Tue	1730Z	DJ2ZB	3555
107	Central Florida	Sat	0900L	W4LHP	7243
		Thu	1400Z		21380
109	Baton Rouge	Sun	0830L	W5URR	3905
		Sun	2000L	W5URR	146.19
110	Kansas	Sat	0730L		3920
112	Yankee	Sun	0830L		3902
114	North Texas Chapter	Sat	1430Z	W85PHM	3943
117	Applesseed	Sun	2030L	W8JYY	147.36/96
118	Coastal Cardinas	Mon	2000L	W4EHF	146.28
118	Coastal Carolinas	Mon	2000L	W4EHF	146.28
120	QC Wireless Women	Tue	1900Z		14295

122	Lake Erie-Tri State	Sun	0930L		3915
123	Lee deForest	Sat	0730L	K0DBW	3885
125	Halifax Chapter	Tue	1930L	K2HWF	147.15
126	Piedmont	Sun	0900L		3935
128	Pelican	Sat	1000L		145.29
130	Inland Empire	Sat	0800L		3862
131	Gulf Coast	Tue	0900L	WF4V	28750
134	Pine Tree	Sun	1930Z		3942
135	Mid-Michigan	Tue	2000L		146.40
138	Central New Jersey	Tue	2200L	W2DME	147.045
140	Wyoming	Sat	1500Z	W7MZV	3923
143	North Colorado	Sun	0830L		145.115
146	Twin State	Sun	0830L	W1SVT	3897
149	Nutmeg	Sun	1630Z		3923
150	Del-Mar-Va	Sun	0900L	W3BY	146.22
151	Wild Rose	Tue	0200Z	VE6EO	7070
152	Royal Palm	Dly	1800Z	W4LZV	3910
		T&T	1830Z	W4LZV	14180
154	Leo Meyerson	Thur	1830L	V	145.490
157	Pony Express	Sun	0830L	K0LJK	3955
160	Utah Chapter	Sat	1730Z	W7FVM	7272
162	Southeast Wisconsin	Thu	0300Z		147.27
164	Big Bear Lake	Sun	0300Z	K6GCF	147.33
165	York County	Thu	0200Z	W3AXC	146.97
167	Gold Coast	Wed	1930.PST	KI6YN	147.885

QCWA INTERNATIONAL & REGIONAL NETS

QCWA INTERN'L	Sun	2000Z	W6PQ	14347
QCWA CW NET	Wed	2000E	W5QU/W4PI	7035
Florida SSB	Sat	1300E	W4NWF	3955
NE Regional	Sun	0845L	KA2DXW	3917

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QCWA JOURNAL ON CASSETTE TAPE

The QCWA Journal is available on cassette tape for members who have trouble reading the printed page.

For information write to

Blanche Randles, W4GXZ
HCR 32, Box 591
Stoddard, NH 03464

NORTHERN LIGHTS CHAPTER 92

Roy Gould AL7MZ, 7121 E 34th, Anchorage, AK 99504

The May luncheon was held May 25, 1991 at the Royal Fork. Again a good turnout with sixteen present. It was voted to hold a luncheon meeting at the same place and time each month on the last Saturday. The next meeting to be June 29. There will be one exception - that being the summer picnic which will be held on July 27, 1991 at Pop Carrs Park in Anchorage.

On behalf of the members of Chapter 92, I want to welcome Jim Wiley, KL7CC, as a new member of the Chapter. Nice to have you with us, Jim. Jim is also a member of the South Central Radio Club and invites us all to the meetings which are held at the Abbot Loop Church in the Science room on the second Friday of each month, at 7 PM. The Abbot Loop Church is at the intersection of Abbot Loop Road and Lake Otis.

And, you may have noticed - Chapter Secretary, Roy has a new call - it was N6GM and is now AL7MZ! Congrats, Roy.

NIAGARA FRONTIER CHAPTER 65

Donald E Wagner, W2QFC
308 Parkdale Ave, E Aurora, NY 14052

Niagara Frontier Chapter 65 held its annual Spring banquet jointly with the Radio Association of Western New York, May 21, at Warrens Steak House. A fine attendance of 83 OM, YLs and XYLs enjoyed a full course gourmet dinner and heard from Chapter President Bert Jones, W2CUU, who with Bob Habermehl, W2KKZ made the arrangements. Edna, XYL of SK QCWA member Earl Whyman, won the door prize.

Chapter Secretary Ken Palmer is spending the summer as a ships Radio Officer calling ports in the Pacific and far East. Watch for K2FJ/mm on the bands. Don Wagner, W2QFC is the acting scy.

The annual Chapter picnic was scheduled for August 11, at the summer QTH of Bob Johnson, W2WVC. Saturday noon get-togethers continue to be held at the Williamsville Inn.

LEE DE FOREST CHAPTER 123

Al Smith, WOPEX - 3529 Douglas St, Sioux City, IA 51104

We were honored to have President Harry Dannals, W2HD at our QCWA Luncheon at the Marina Inn in S Sioux City, NE on May 4. This is an annual luncheon held in conjunction with the Hamboree Radio Convention. There were 53 in attendance including a goodly number from Chapters 8, 25 and 102 as well as other chapters. Leo Meyerson, W0GFQ, past QCWA Director was in attendance. Harry Dannals addressed the group, bringing us up to date on QCWA activities and planning. He had recently attended a meeting of QCWA officers as well as the Dayton Hamvention. Harry spent a lot of time at the QCWA table in the convention exhibit area visiting with members and signing up new members. Leo was very active in convention activities such as his famous Sing-a-long, old time movie and an exhibit relative to the QCWA Museum in Omaha. President Dannals presented QCWA Golden Certificates to the following members: Vernon V. Holmes, W0LR; Isadore J. Rocklin, W0BZX; Erland F. Maurer, K0ADO; Leonard Strohm, W0GSH; Vern L. Peterson, W0QJD.



In the picture above, L-R are: Erland Maurer, K0ADO; Leo Meyerson, W0GFQ; Isadore J. Rocklin, W0BZX; Harry Dannals, W2HD; Vern L. Petersen, W0QJD; Vernon V. Holmes, W0LR and Robert R. Beals, K0DBW.

The Chapter's annual business meeting followed the luncheon. All Officers were re-elected to serve another term.

ON THE QCWA VESTS!

If you have experienced problems with the fit, or size of the QCWA Vests purchased recently the manufacturer requests that you contact him direct!

Write to:

James H. Downey, K5QNE
3619-A N. State St,
Jackson, MS 39216

State clearly the problem you have!

CHAPTER NEWS AND REPORTS

KANSAS CHAPTER No. 110

C Steve Schultz, W0CHJ
520 S Jefferson, Junction City, KS 66441

Kansas Chapter held its Spring meeting Sunday, June 2, in conjunction with the Central Kansas Amateur Radio Club yearly hamfest in Salina, Kansas

First order of business was the 1991 election of officers. Fred Stueve, K0TCS was elected President; Wendell Wilson, W0TQ Vice President; James McKim, W0CY Secretary/Treasurer, C Steve Schultz, Publicity; Paul Chapman, KA0RZO was elected Board member. Bob Davis, K0FPC agreed to take over the Secretary-Treasurer's duties until Jim McKim was out of the hospital and able to resume his duties. Jim's heart problems are being diagnosed in a Wichita Hospital. We wish Jim a speedy recovery.

The next meeting will be in Concordia on September 14. This will be a joint picnic meeting with the Kansas-Nebraska Radio Club helping them celebrate 50 years as an ARRL Affiliated Club. The Club operated independently for 15 years prior to 1941. The Annual meeting is tentatively scheduled for Saturday noon, in Manhattan.

LETS CHAPTER No. 122

Bill Tammen, W9KEP
241 W 7th St, Erie, PA 16501

The meeting of LETS Chapter 122 was held at the Captains Table in Mayville, NY on June 1. There were 13 amateurs present and 10 visitors. The meeting began with a lunch at 12:30 PM

Following the lunch, FBI Officer Kim Kelly presented a program on FBI work in the area around Erie. He told of working to control the program of drug dealing in the Kane and New York areas. He also shared how the FBI had gotten involved in a murder case in Corry, PA. There was a period of questions and answers following the presentation.

Members participated in a discussion concerning future meetings and plans for 1992. Since there will be a hamfest in Erie the second week of September, it was decided not to have the picnic in August as previously suggested. We will meet at the Hamfest and then go to the Charcoal Pit, opposite the Waldameer Park for lunch.

Members of Chapter 122 were urged to attend the National QCWA meeting in Canton, Ohio on September 27 - 28, 1991. Registration blanks are available from Bill Tammen. We hope a good delegation from our club can be present! Plan now to attend!

Please check the information on the mailing label bringing you this copy of the QCWA Journal. If it is not correct in all parts, notify HQ with corrections!

COOCOM COMMENTS ON WARC GIFT

The following is an excerpt from a letter written by Arthur F. Kunst, a delegate of COOCOM, a group of chapters including Cleveland, Erie, Pittsburgh, Akron and Canton.

"I am pleased to be advised that a donation of \$1,000 has been made by QCWA to the WARC Fund. While our Chapter delegates in COOCOM clearly would have recommended greater financial support, there is always the opportunity to add to this sum if future events so require.

Also, this contribution demonstrates that QCWA has committed itself in a most tangible and public way to the radio amateurs' common cause-protecting our frequency allocations. We believe QCWA is the senior authority of radio amateurs, and as such should be in forefront of WARC effort.

I am advising the delegates of the five QCWA participating Chapters of the status of their concern for WARC support by QCWA, I endorse the plan to show the narrated video tape of 'stills' from the League on WARC activities at Canton. This should serve to educate all of us, and provide a common base for any follow-on discussion.

On behalf of my fellow delegates in COOCOM, I commend the Board of Directors for their timely support action on the matter of greatest concern to most radio amateurs, at this time."

/s/ Art, W3WM

The letter has been edited slightly, but the intent is unchanged from that intended by the writer.

QCWA CHAPTER 179 AUTHORIZED

SOUTHERN ILLINOIS CHAPTER 179

Charter issued June 26, 1991. The Chapter will operate in the southern Illinois area.

Officers elected, until the Charter was issued were:

Jerry Todd, W9ATS, President
901 Allen St, Greenville, IL 62246

Michael Hoshiko, W9CJW, Secretary
707 S James St, Carbondale, IL 62901

Welcome to QCWA!

CHAPTER NEWS AND REPORTS

SUWANNEE CHAPTER 62

Joseph R Chartier, WIRFE
3637 SE 31st Ter. Ocala, FL 32671

The Suwannee Chapter was forced to cancel the June meeting due to a last minute close down of the regular meeting spot in Ocala.. This was prompted by major road construction making access to Don's difficult. Re-opening is predicted for September. After discussing the problem with many members and the directors, it was decided to cancel the August meeting as well and resume at Don's for the Thursday, Oct. 24th meeting. Road construction appears to be moving well enough to make this October date realistic.

The speaker for the October meeting will be the chapter Vice President, Tom McDonald, W1MRJ, who will present a spotlight review of his aviation background and his work in the FAA. The Newsletter for the October meeting will include a ballot for the election of officers and directors for 1992 and the results will be announced at the meeting. Adis Henry, W4PFJ, was the nominating committee in total and she did a great job in producing a fine slate of candidates.

The pictures from the photo session by Doug Morick, W3NNT, will be available and the chapter appreciates his efforts. Doug will be able to arrange for prints for the interested members. The Chapter lost a faithful member, Scott Magness, K4ZY, who passed away in June. A sizeable group of Suwannee Chapter members attended a memorial service in Ocala.

Many members have been away during the summer months so we are looking forward to the October and December meetings to "catch up" on their summer activities.

GATOR CHAPTER 32

Eli Nannis, K4JMH
14996 Imperial Point Dr. N. Largo, FL 34644

We are now having our informal meetings during the summer months. It's surprising that the attendance is keeping up quite well. At our June meeting we had an attendance of 35. We read a letter from Paul Turner W1DLP, our former President who has moved to Winter Park. Paul is well settled now and will probably join the Citrus Chapter.

We have had two Silent Keys recently, both charter members and former presidents of our Chapter. They were Hal Bates, W4OIN and Hal Rice, W4FOM. We will sure miss them. Members were asked to tell how they happened to become Hams. There were very interesting comments. Our new President Barton Bridge, W2YZG ran his first meeting and did quite well.

Fred Leadham, W1WOX, was quite sick but he has made a wonderful recovery and is once again attending meetings.

He is in charge of our net which is on every Saturday morning at 9AM on 145.29. We have passed around to all members a radio equipment inventory sheet. Our members were requested to fill out these equipment lists so its worth can be easily determined in case of death and the widow will have some idea of what it is worth. We advise all chapters to do this.

CHAPTER 38, SAN ANTONIO, TEXAS

Pictured here is Francis Bruemmer, W5KQG, who has been active in the Chapter for a long time. At left, Louis Kocurek, Chapter President has just presented the QCWA Golden Certificate to Francis. She was first licensed in 1941 and the phonetics tell the story "Kan't Quit Gabbin" "We all love her. In the early days of her ham life there were not so many YL's on the air. She is one of the few who have received the QCWA Century Club Award. Congratulations, Francis!



YANKEE CHAPTER 112

Blanche L Randles, W4GXZ
HCR-32 Box 591, Stoddard, NH 03464

Yankee Chapter's summer picnic was, once again, held at the Summer home of Walter Woodward, W1RCJ, in York, ME. We have always been blessed with beautiful weather for any function we have planned and this was no exception - well, at least we didn't have rain! It was a very sultry, hot, humid summer day but the excellent company of 19 members and guests, plenty of good food and the shade of a lovely old Maple tree made the afternoon a most pleasant one.

The President announced that the Secretary has resigned and we will find and appoint someone to fill this office.

To all QCWA friends who may be visiting in the New England area please join us on our net which meets each Sunday morning at 8:30AM local time on 3.902mhz.

The Christmas party was planned for early December and our Annual meeting will be held at Franklin Manor

CHAPTER NEWS AND REPORTS

in West Boylston, MA, if possible April 25, 1991.

The results of the QCWA National election were announced and our members were very pleased that Lew McCoy, W1ICP, our transplanted New Englander was elected Vice President and our own Wes Randles, W4COW was re-elected Treasurer.

Our thanks to Woody, W1RCJ, for once more extending his most gracious hospitality.

NUTMEG CHAPTER 149

Frederick G Heffner, W1CKV
213 N Granby RD. Granby, CT 06035

The annual meeting of the Nutmeg Chapter was held on May 11, 1991 at the Chestnut Lodge in Colchester, CT. Many of the members of the chapter were present for this important election meeting. After the usual reports from the Secretary/Treasurer, Milt Chaffee, W1EFW, and a minimum of old and new business, the meeting progressed to the election of officers for the coming year. All of the present officers were re-elected with the addition of a new person to assume the position of Secretary. (With this, W1EFW breathed a sigh of relief as he has been doing the job of secretary and treasurer for the last few years!) The new officers for Chapter 149 are:

President: W1CKV - Frederick Heffner, Vice President: W1EES - Harold Chase, Secretary: W1UWU - Robert Obert Treasurer: W1EFW - Milt Chaffee

W1KHL, Cal Bennett agreed to stay on both the Net Manager and the Activities Chairman jobs..

After the meeting was adjourned we were all treated to a most fascinating talk by fellow member Robert Rinaldi, WS1J on Amateur Astronomy.

SOUTHERN ONTARIO CHAPTER 73

Harry W Reynolds, VE3MO
RR 1, Jarvis, ON, Canada, N0A 1J0

The spring bi-annual meeting of Southern Ontario Chapter 73 was held May 11, 1991, at the Mohawk Inn, Campbellville, ON, with 80 members and guests in attendance.

It was with regret that QCWA President Harry Dannals, W2HD, was unable to attend this meeting to present the QCWA Presidential Award to Noel Eaton. The members gave a standing ovation to honor Noel. Also honored with a standing ovation was Fred Hammond, VE3HC, on having been awarded the QCWA Distinguished Service Award.

The Chapter welcomed their newest member, Mary Card, VE3FEB. She is the daughter of John, VE3RW and Jean VE3CKH. Congratulations to the Card family for their participation in Chapter 73. We wonder how many other chapters can boast of such family participation. Congratulations to all who took part in the

1991 QCWA QSO Party. Hope there will be more next time.

Many thanks to Mel Riddell, VE3QU, for his PR work at the local hamfests spreading the word about QCWA, particularly Southern Ontario Chapter 73/ Members are reminded to keep their dues paid in Ch 73 and National. The fall bi-annual meeting will be held October 12 at the Mohawk Inn Campbellville, ON, exit 312 Hwy 401

WASHINGTON D.C. CHAPTER 23

Stan Brigham, W3TFA
7211 - 16th Avenue, Takoma Park, MD 20912

The Washington, D.C. Chapter along with the Vic Clark Chapter of Northern Virginia were hosted at a joint picnic meeting at the home of Ethel Smith, K4LMB, on June 29, 1991. This was the second quarterly meeting of the year. It was nice to see so many familiar faces once again. Chapter 23 was well represented by W3AFV, W3HXF, W3RY, W3TFA, W4GF, W4HU, W4HV, K4JAP, N4JQG, W4JTK, K4LMB, N4LMC, K4MM, W4SWP & W4ZC. Sustaining membership dues were collected and a brunch affair was scheduled for the for the latter part of October.

The next topic for consideration was plans for the next meeting. It was decided to meet again at the same time and place on October 24. Meeting adjourned 2:45PM

BATON ROUGE CHAPTER 109

El Charlton, W5MD
1533 Outrigger Dr, Baton Rouge, LA 70816

Our Baton Rouge Chapter 109 held an informal get-together Saturday the 13th of July at Robin's restaurant in Henderson, LA. We had 47 attendees including the XYL's and guests. A great time was had by all plus lots of good Cajun food.

Our membership now stands at 110 with approximately 30 or so cities in Louisiana represented. Besides that figure we have one or more members in Mississippi, Texas, Arkansas and Florida. We also have around six or seven members that regularly check into the National net on Sunday afternoons.

We cordially invite any QCWA member - whether at large or a member of another Chapter - to check into our Sundaay morning net. We are on 3905khz starting at 1330Z. Join us, we're a friendly bunch and will make you feel welcome. If you would like to become a member of our Chapter just drop a card to either me (W5MD) or to our Secretary, K5DVQ. We are in the directory.

CHAPTER NEWS AND REPORTS

PIEDMONT CHAPTER 126

William R Hutchins, KM4UO
5605 Brisbane Dr, Chapel Hill, NC 27514

Chapter 126 had a very interesting spring meeting on March 23, 1991. In order to visit JAARS, the Jungle Aviation & Radio Service, it was held in Waxhaw, NC, which is on the South Carolina border and at one edge of our territory. As a result only 21 attended.

We had a fine lunch and quarterly meeting at a local restaurant where our new President, Ed Naher, K8YFR presided. After the business meeting, we all drove to the JAARS facility and airport. There Ron Durie, WB4OOA took us on a tour of the operation. JAARS is a support facility of the Wycliffe Bible Association. This organization is devoted to translating the Bible into all languages. There are over a thousand languages in the world which have no written form. Wycliffe translators work in remote areas using advanced technology to produce written forms of all these languages. JAARS maintains world-wide radio communication and air transport for these translators. All 750 JAARS employees are volunteers, supported by various churches. This was a very interesting afternoon giving us information on one of the less well-known applications of radio communication, much of it amateur.

We continue to get an average of 13 check-ins on our Chapter 126 net at 8:45 local time each Sunday morning

PELICAN CHAPTER No. 128

J Frederick Strom, K9BSL
233 34th Ave North, St Petersburg, FL 33704

At our chapter meeting on February 20, more than 250 years of amateur radio was present. QCWA Anniversary Awards were handed to those in the picture below:



Above, L-R are: Red Spaulding, W4PUZ (70 Years); Lynn Brendel, K4HCV (65 years); Dutch Romig, KF4DI (60 years); Hal Fox, W3AA (55 Years) - Awards were presented by Wes Randles, W4COW, at far right.

HARRISBURG CHAPTER 37

R M Stenger, W3KRM
124 Lincoln Terrace, Fayetteville, PA 17222

Chapter 37 would like to report that our regular quarterly meeting was held Saturday, June 8, at the Bonanza Restaurant in Camp Hill, PA.

There were no silent keys to report. The secretary's report was accepted and the treasurer reported a respectable balance in the treasury. No dues were required. An election was held with the following being selected to serve for the coming year:

David Borrows, W8IJ	President
Barney Schmidt, K3LG	Vice President
R M Stenger, W3KRM	Secretary
Joe Macko, W3HQA	Treasurer

Seventeen members and 2 guests were in attendance and no new members were enrolled at this meeting. No special program had been planned for this meeting so, after business was taken care of, we adjourned until September 14, 1991, and enjoyed some old-fashioned ragchewing!

NATIONAL CAPITAL CHAPTER No. 70

Ralph Thomas, VE3GG
2180 Benjamin Ave - Ottawa, ON K2A 1P4 Canada

Our November 21, 1990 meeting was cancelled due to the sudden death of Walt Wooding, VE3WW. Walt will be sincerely missed by his many friends in the Chapter. The feature speaker, George Schuthe, VE3DMC gave his talk at the March 27, 1991 meeting. George took us back to our early radio days with nostalgic recollections of a radio school in Vancouver.

At our May 15th meeting, Croft Taylor, VE3CT gave a very interesting talk on the history and present practices of a large telecommunications carrier with regard to alternate routing in the event of a major failure. Those present were very interested and Croft fielded a number of questions from the floor.

George Schuthe, VE3DMC has completed an update of the Chapter History, which is being prepared for distribution to the members. He has served for a number of years as Historian, and is now taking a well-earned rest and is being replaced in that capacity by Carl Everson, VE3BYX.

Our next meeting, Ladies Night, is planned for September, however we have to find a new meeting place as the restaurant where we have been meeting is being renovated and will no longer cater to meetings. Gord Grant, VE3DY will be the speaker at that meeting.

Our Secretary/Treasurer, Ralph Thomas, VE3GG is regrettably stepping down due to health reasons, and is being replaced by Phil Robinson, VE3CUR. We wish Phil well with his new appointment.

CHAPTER NEWS AND INFORMATION

GERMAN INTERNATIONAL CHAPTER 106

Gerhard Jacoby, DL3ME
Widdersbergerstrasse 40, D-8138 Andechs, Germany

Chapter 106 the German Chapter, had its annual meeting May 3, 4 and 5, 1991 at Hochheim near the city of Mainz well known for its excellent wines. On Friday we had dinner together, the official meeting to follow. It was a somewhat strange



situation: as we had an election year the officers had all together resigned and did not want to serve another term. But there was no proposal for any of the "ruling four" so at the end of the discussion, Gerd, DL3ME proposed that the assembly should unanimously elect the old crew for another term of two years and so it happened. Therefore, Otto, DL8AJ, as President, Heri, DL9YO as Vice President and Alex, DL9RW as treasurer and Albert, DL9AR as Secretary were reelected and accepted the acclamation. Attending were about 60 members.

On Saturday the bus did take us first to a sightseeing tour to Mainz, its old churches, monuments and old mansions. Then followed a lunch break in an inn with its own brewery within the guestrooms. Unique at least for Mainz. At two o'clock the bus took us for another tour to the Rhineland (vineyard) along the river Rhine. The last stop took place at the "Niederwald Denkmal" (low forest monument remembering to the victory of France in 1871). The picture above shows the large crowd of Chapter 106 members with xyls. We missed Jean, LX1JW very much but after two time of surgery he was not able to make the trip.

Next meeting took place at Friedrichshafen on occasion of HAM RADIO, biggest event in Europe with 17,531 attendees from all over Europe, and with QCWA and OOTC manning a booth and helping a steady stream of visitors who came by. If all interested will become members of one or both of the organizations, more than 20 new members will join our ranks.

The next meeting to come is the occasion of NAT. The Dutch German Border meeting at Bad Bentheim and following in November Interradio, another event at Hannover, the next meeting to come is the occasion of NAT The Dutch German border meeting at Bad Bentheim.

AN EXPLANATION

John Eric Lindell, CPA, 8700 9th Ave, Ste 103, Regional Square III, Port Arthur, TX 77642-8030 (409 727 0201)

August 19, 1991

Dear QCWA Members: I hope you are as proud of your QCWA membership as I am.

During the most recent election I ran for the office of QCWA Treasurer. I was very proud of the number of votes cast. However, a serious error was made by the mail room personnel who handled my mailing of several hundred letters.

I had approved the inserts and other material which was mailed. I left word for the return address to state "For QCWA Treasurer." Somehow the people left off the "for", thus creating a misleading impression that I was the current treasurer.

Maureen and I were in California for 10 days and in Europe for twenty-four days. I did not learn of the error until July 22. Needless to say I was highly upset!!!

I want to apologize to each of you for this greivous error. I take all the responsibility for the error. I thank those who voted for me and of COURSE, offer my support to the Board of Directors and Officers of QCWA.

/s/ John Eric Lindell, WOYCY

CHAPTER NEWS AND REPORTS



Above, L - R . Chapter President, John Spark, W4LHP and Al Streling, W4OFT, who was originally licensed as an operator in 1919! He was a partner in 8DGU, suburban Detroit circa 1919.

WISCONSIN BADGER CHAPTER 174

Frank L. Guth, W9BCC
1632 Ellis St., Stevens Point, WI 54481

The second regular meeting of the newly formed Chapter 174 was held May 11th at the Captain's restaurant in Wausau, WI. 23 members, wives and guests were present for the happy hour before the noon luncheon. One member arrived after the luncheon before the meeting.

The meeting was called to order at 1310 hours by the President, Bob Baird, W9NN. The minutes of the last meeting were included with the notice for this meeting so the Secretary, W9BCC, read the minutes of the meeting of the Board of Directors held April 11. W9GHY gave us the status of our treasury. We are solvent with a balance of \$80.93. Mike also reported our checking account with M&I First National Bank enjoys a free checking status. The reports were accepted as given.

We were honored having Travis Baird, W9VQD, a member on the Board of Directors of QCWA, Inc. at our meeting. A question was asked about the status of Congressional Bill HR73. Travis reported he did not know its exact status. He did say that Harry Dannals, President of QCWA, cautioned members not to write letters as from QCWA. One can write on an individual basis, but any reference involving QCWA might endanger QCWA status as a tax exempt organization.

The President appointed a nominating committee to prepare a slate of candidates for election of officers and directors at our annual meeting in September. It was decided to hold our next meeting in Wisconsin Rapids, WI on Sept. 4th.

CENTRAL NEW JERSEY CHAPTER 138

George W Hasslinger, WB2CGI
61 Russ Lane, East Brunswick, NJ 08816

The tenth Annual Dinner Meeting of Chapter 138 was held on May 5th, 1991, at the Fort Monmouth's Officer's Club. Over one hundred members and guests were in attendance. After the Social Hour, Phil Petersen, W2DME gave the invocation and led in the Pledge of Allegiance. A delightful dinner was then served to the guests. President Jerry Havel, W2RRX, then presented awards to the following members:

QCWA 50 year Gold and 50 years Continuous Licensing Award Chapter 138 Diamond Jubilee Award - Francis McAllan, W2SPB; Stanley Krenzel, W2HEN; Stephen Sinkez, W2DOR; Harold Schnabolk, W2IBG; Lawrence Houseman, W2GIS; and Harry Mussemen, W2KIY.

Chapter 138 Elmer of the Year Award - George Hasslinger, WB2CGI

QCWA Meritorious Award for his untiring efforts on behalf of the Chapter and Amateur Radio in general - Philip Petersen W2DME.



The Chapter presented a plaque to the Fort Monmouth Mars Station for its outstanding performance during the Gulf War. Major General William E. Harmon of Fort Monmouth was present to also express the Military's thanks to the station and accepting the Plaque. The event pictured above. Those shown are: L_R: Bill Dixon, N2CXX; Jerry Silverman, WB2GYS; Major General William E. Harmon and Chapter President Jerry Havel, W2RRX.

This issue of the QCWA Journal was a tough one to get out. Right in the middle of the work your editor had to undergo major surgery. It came out alright and we're now back in the saddle but, without the Help of a few of you birds we'd still be stuck at the gate.

Barney Moffatt, W5CJZ, Walt Wiederhold, W5OGZ, and Ruth and Nadine all pitched in to get the work out. And we are certainly thankful that they were here and willing!

CHAPTER NEWS

PIEDMONT NORTH CAROLINA CHAPTER 126

William R. Hutchins, KM4UO
5606 Briabane Dr, Chapel Hill, NC 27514

Our June quarterly meeting was held at the University of North Carolina. At the formal meeting President Ed Naher, K8YFR led a discussion of methods for recruiting members. Carl Stamesm, W4EAT and Bill Hutchins, KM4UO were delegated to pursue the matter of recruiting booths at local hamventions.

The meeting was adjourned to Gardner Hall where an electronic master classroom as the site of a tour of computer information systems by Judith Haallman, Director of Information Service at UNC. Judy introduced us to INFO the University's computer information resource. The permits campus users to locate all sorts of useful information from course catalogs, through available jobs to local bus schedules. After demonstrating some of these she then switched to the Internet, the world-wide collection of networks which ties most major educational and research computers together. By using the Internet, a user can access things as disparate as the North Carolina supercomputer and the football schedule for the University of Colorado.

The program ended with descriptions of some of the commercial services, such as Dow-Jones, Prodigy and Compuserve.

COLONIAL CHAPTER No. 166

Howard J. Trout, W3IGW
Vyrnewy Acres, 74 Laurel Ln, Pottstown, PA 19464

The Colonial Chapter 166 annual picnic held on the lawn at Bill and Alice Findley's home near Parkburg, PA, on August 1, 1991, was a great success. It was a catered affair attended by members and guests who enjoyed the barbecued chicken and London broil with all the extra g.



It was a pleasure to have Walter Brink, W3WPY, QCWA Headquarters Director with us. He sold a few QCWA caps and signed up a few new members and informed us of happening at QCWA Headquarters.



a total of fifty-two people were present to take part. Most of them shown in the picture above.

On Bill's property, there are four repeaters and an antique radio museum. Bill has over 250 radios, some dating back to the start of the radio era. The four repeaters are on 144MHz, 220 MHz, 440 MHz and 12 GHz. The antennas are on four towers, one at 100 feet the others at 75 feet levels.

In the picture above, are shown the officers of Chapter 166. They are, L-R: Charlie Stouth, W3ZZF, Director; Bill Findley, W3FEA, Vice President; Bill Turner, K3NYQ, Director; Walt Brink, W3WPY, Director, National QCWA; Howard Trout, W3IGN, President; Paul Bohlander, W4VVS, Director; Woody Sbel, W#TTW, Treasurer; Bud Davis, K3WAC, Secretary. Bud was there but somehow got left out of the picture.

CANTON, OHIO CHAPTER 21

Chapter 21 held its quarterly dinner meeting May 18th, at Five Oaks, a historical land mark in Massillon, Ohio. A swiss steak dinner with all the trimmings was catered by the women's club of Massillon. We thank the ladies for the excellent service. 38 were in attendance. After dinner the meeting was called to order by the President, John Edel, K8LBZ and those attending were briefed on the matter of the Convention Progress. The Committees had met on the 17th, just the day before. One member, George Weisman, W8SPZ was reported to be in Alliance Hospital having suffered a heart attack and Myron Kiefaber, W8BML cancelled his reservation to the meeting due to a blood clot in one leg. Several were out of town. Roy and Arlene Burckhart, W8CZA were in Buffalo, NY and Joe and Pat Vignos, W1FEZ spent that weekend in Connecticut.

The program by Lohn Linton, W8DKI was cancelled due to a case of laryngitis. Janet Edel filled the gap with a narration of a slide travel of a previous trip to Hawaii in January. Thanks, Jan!

I apologize to Kelley K8YDR for stating in the last newsletter that Five Oaks had a handicapped entrance and will blame my reliable source. By the time you read this in the Fall Journal the Convention will be only days away. Chapter 21 wishes to thank those who have registered and a final invitation to late callers, that the light is still on. Call Dennis 1-216 452 3872.

SATELLITES & ENGINEERING

WHAT DO YOU THINK OF QCWA'S SATELLITE NEWS?

In the Summer issue of the QCWA Journal we asked readers to let us know if they liked the Satellite news, and to advise us either way. A few took the trouble to do this. To those we offer a kind thank you for your interest and help.

We asked four questions below is the tally as received here at the editorial offices. Our comments follow:

- (1) Call responding
- (2) are you interested in satellite news?
- (3) Have You considered trying to participate?
- (4) Are you seriously considering getting on the birds?
- (5) Do you want Satellite News to continue?

(1)	(2)	(3)	(4)	(5)
W6OR	no	no	no	no
K3SRP	yes	yes	yes	yes
VE3ST	yes	yes	yes	yes
W8BKO	yes	yes	yes	yes

And, a letter of unusual content regarding the Satellite News:

"06/27/91" As a life member of many years standing I would like to respond to the "Editor's" note on page 61, regarding the Satellite News.

As I am a member at large as there isn't a QCWA Chapter within many miles of the present QTH in the mountains of Western North Carolina. I did belong and attended meetings in Minneapolis and the QCWA chapter in Sarasota where I gave satellite talks and demonstrations. But, the fact that I do not attend chapter meetings does not diminish my enthusiasm nor my respect for the organization and do read the QCWA Journal from cover to cover.

I am one of the few really old timers still active on the satellites. I had my first satellite QSO on Oscar 3 on March 13, 1965 and have worked all satellites since. I mention this only so you will take my comments on Keith's Satellite Column in the spirit it is given. I have read (and also written) articles about amateur satellites in various periodicals and can appreciate the effort and time these articles consume for each issue. These articles are for the most part a strong encouragement for newcomers to get their feet wet. You don't have to be a teenager to be a new comer - there are plenty of QCWA'ers that can be newcomers and columns such as Keith's will enlighten the way. If you OTs are tired of the same QRM on 20 meters, follow Keith's advice - there are new fields to challenge and conquer.

I am particularly impressed with Keith's article "New Satellite Status, Summer, 1991 issue. In all the hype on RS-12/13, no one, I repeat, no one has made operating the Russian Sputniks any clearer than his second paragraph and spelling out the frequencies and how they are to be used. This is all that an article in a periodical is supposed to do - not to swamp the newcomer or a potential newcomer with the rhetoric about Argument of Perigee, Mean Anomaly or the 'squin angle'.

I salute Keith on his precise and accurate articles. I trust the QCWA Journal will continue this excellent reporting.

/s/ Nick J. Laub, W0CK
411 Dahlia Lane
Waynesville, NC 28786.

SOLUTION TO THE SMALL PROBLEM OFFERED IN THE SUMMER, 1991 QCWA JOURNAL.

You may remember that on page 87 of the Journal that we assumed an antenna load impedance to be $40 + j60$ ohms, working against ground. It was suggested that you compute two ways to make that load resonant and the simplest way to go would be to add a component making the load parallel resonant and again, add a component making the load series resonant.

This is a common problem met by field engineers, and certainly no challenge to that breed of cats. There are, however, many more of us who tangle with this sort of problem only occasionally, and it takes a few minutes to reason out the method needed to find the unknown value. To those who found the right answer, our hats off. To those with a bit of difficulty, don't give up. I asked a highly qualified engineer for a quick answer to the problem - he got it all right, but it wasn't quick!

My procedure is as follows: Take the impedance $40 + j60$ and convert it to polar notation. This impedance so expressed would be $72.11 / 56.31$. Now, the next step is to divide the real term as given in polar (72.11) by the angle (56.31). To the angle 56.31 , add 90 degrees to get 146.31 , find the cosine of 146.31 to get (-0.8321) and divide the previously found real term by the $(72.11)/(-0.8321)$ to get the value -86.67 . This is the value of reactance necessary to resonate the antenna load, and since it is negative, will require a capacitor of that reactance.

In our problem we manipulate the values about as shown here:

$(72.11/56.31) \times 96.69/00.0 / (40 + j60) \times (0 - j86.67)$. Combining the values we have:

$6970.87/-33.69 / 48.08/-33.69$. To resonate a parallel capacitor of $-j86.67$ ohms is required, resulting in a combined load impedance of $+j144.98$ ohms for the parallel arrangement and, in the series, the required reactance for resonance is a simple capacitor of $-j40$ ohms reactance.

Following are answers received to the two problems:

Call Sign	series reactance reqd	parallel reactance reqd
WW8G	-j40	-j65
J2CV	-j40	86.67
WA2ANU	-j60	j86.67
W0WNY	-j40	j86.67
W7QR	-j60	-j86.67
W5DJ	-j40	-j86.67
W1KUL	-j40	-j86.67
correct answer is	-j40	-j86.67

Thanks to all who worked through the stuff. Try those in the Journal this Fall issue!

CHAPTER NEWS

For a full report on the tellers work, see page 96

CANTON, OHIO CHAPTER 21

Chapter 21 held its quarterly dinner meeting May 18th, at Five Oaks, a historical land mark in Massillon, Ohio. A swiss steak dinner with all the trimmings was catered by the women's club of Massillon. We thank the ladies for the excellent service. 38 were in attendance. After dinner the meeting was called to order by the President, John Edel, K8LBZ and those attending were briefed on the matter of the Convention Progress. The Committees had met on the 17th, just the day before. One member, George Weisman, W8SPZ was reported to be in Alliance Hospital having suffered a heart attack and Myron Klefaber, W8BML cancelled his reservation to the meeting due to a blood clot in one leg. Several were out of town. Roy and Arlene Burckhart, W8CZA were in Buffalo, NY and Joe and Pat Vignos, W1FEZ spent that weekend in Connecticut.

The program by Lohn Linton, W8DKI was cancelled due to a case of laryngitis. Janet Edel filled the gap with a narration of a slide travel of a previous trip to Hawaii in January. Thanks, Jan!

I apologize to Kelley K8YDR for stating in the last newsletter that Five Oaks had a handicapped entrance and will blame my reliable source. By the time you read this in the Fall Journal the Convention will be only days away. Chapter 21 wishes to thank those who have registered and a final invitation to late callers, that the light is still on. Call Dennis 1-216 452 3872.

Special thanks go to QCWA Members who took the time to vote in the recent election reported in this issue of the Journal.

Voting for candidates of your choice is a privilege and insures that QCWA will continue as a viable organization into the future.

PALMETTO STATE CHAPTER No.89

John R. Miller, WOIKT
401 Tiffany Dr, Anderson, SC 29625-1815

Some of the members of PSC-89 spent the summer counting ballots and making tally sheets, then doing the same thing again for the necessary re-check. We really don't think we want to see another ballot or tally sheet again for a long while!

Some of the action is shown on the three pictures below:



Clockwise, Rip, W4FK(back to camera)Emmie, KA4LRM; and Lee, W4DRF



Clockwise, Wells, N4EE; Ed. W4PT; Joe W4DNR and Joe K4FNK



And above, Linda Miller, and John, WOIKT, checking the tally for the last time!

A big thanks go to Palmetto State Chapter and to its members for their superlative job of counting ballots!

Don't forget - you have plenty of time to get a petition to nominate a member for the office of Director, in the 1992 election. The petition requires 25 signatures of members and must be in the Secretary of QCWA hands by December

MEMORIAL FUND REPORT

The Foundation For Amateur Radio



Washington, DC

FAR Scholarships
 6903 Rhode Island Avenue
 College Park, MD 20740
 August 15, 1991

John Swafford, W4HU
 Secretary, QCWA
 2025 Kensington Street
 Arlington, VA 22205

Leland Smith, W5KL
 Chairman, Scholarship Committee
 HCR 31 Box 147
 Jasper, AR 72461

Gentlemen:

At last night's meeting of the Foundation, the trustees accepted the Committee's recommendations for thirty-eight awards. The four QCWA Memorial Scholarship winners were

Jerry S. Hensley, N8HUT - New Paris, OH
 Jerry A. Hart, N7FYS - Bellingham, WA
 Evan Caplan, KA3NED - Richboro, PA
 Thomas R. Knoll, KB4KRC - Staunton, VA

The QCWA Leo Meyerson Family Living Memorial Scholarship was awarded to

Robert M. Popella, KA3HIE - Tidioute, PA

The QCWA Robert S. Cresap Memorial Scholarship was awarded to Rebecca Knoll, N4JST - Staunton, VA

and the QCWA Cresson F. Donbar Scholarship was awarded to Jonathan J. Fournier, KA1MPG

Copies of their award letters are attached. The certificates currently in preparation will be sent directly to President Dannels for his signature and delivery or formal presentation to the winners.

DONORS TO THE QCWA MEMORIAL FUND AND THOSE HONORED THEREBY

Donor	Honoring		
Chapter 28	W0HQE	W8CWY	W3DM
Chapter 154	All Silent Keys	NO3M	W3DM
K4LMB	All Silent Keys	Chapter 41	W5GOB & W5VU
AA4GZ	All Silent Keys	Tri City ARC	W7BGH
Chapter 89	W4GL	Chapter 38	W5OSH
Kostezewski Family	KA6JJT	M1FJR	W1JTH & W1TGY
Chapter 123	All Silent Keys	W5KL & WA5WAR	W4KFC
Parker Family	W5PLW	Chapter 71	All Silent Keys
Chapter 142	All Silent Keys		
Chapter 87	W7BGH		

BARNEY'S EXCHANGE

Barney Moffatt, W5CJZ 5714 Trail Meadow Rd, Dallas 75230

FOR SALE - - Kenwood TS-830S & MC50 microphone \$625.00. Will ship in original carton, buyer pays shipping charges. Henry Wroblewski, WA4GIE, 11340 Brown Bear Ln, Port Richey, FL 34668 (813 863 0738).

FOR SALE - - 1940's THRU 1980's vintage ham gear. WANTED - - to purchase pre 1940 ham gear and parts. Send large SASE for either or both lists. Parker, W1YG, 745 16th Ave S, Naples, FL 33940.

WANTED - - Original or make copy instruction manual for Military electron tube tester set TV-2A/U. Jack Kennedy, W5DJ, 5739 Lindenshire Ln, Dallas, TX 75230 (214 661 2503).

FOR SALE - - SWAN Power Supply. Combination of 117XC - AC power supply with 14C 12 volt converter to 117 AC. These two pieces make a 12 VDC to 117 AC pwr supply. Price \$100. Robert J. Wood, K4WI, 3115 Brevard Rd, Hendersonville, NC 28739.

WANTED - - Society of Wireless Pioneers "Sparks Journal" need 14 issues. Write or call collect Bob Arrowsmith, W4JNN, PO Box 166, Annandale, VA 22003 (703 560 7161).

FOR SALE - - Complete Kenwood Station, TS830S, AT230 Tuner, SP230 speaker, and MC 50 microphone. \$850.00. Will deliver up to 400 miles. Darrell M Ray, W0BGM, 509 E 16th, Fort Scott, KS 66701 (216 223 1725).

FOR SALE - - Dentron MLA-2500 linear amplifier 2000+ watts SSB, 1000 watts CW, RTTY, SSTV, continuous duty with 10 meters. Original owner, used less than 10 hours and in excellent cdx \$795 plus shipping. Fred Essex, W6TJO 5072 Aldea Ave, Encino, CA 91316 (818 784 5336).

TUBES WANTED - - under 1 kW for collectors display, working or not, just not broken. 400 types now; CE, 3-400; 4-400; 500; any Penta Labs, 4CW300, 833 A or what have you? Terms? Bill Miller, W5VSD, 10520 Royal Springs, Dallas, TX 75229 (214 352 7123).

WANTED - - Heathkit DX-100. Need not work but nice cabinet for display only. Nate Williams, W9GXR, 6915 Prairie Dr, Middleton, WI 53562

WANTED - - National NC80X; NC81X; NC101X, FBXA; SW3 Universal, power supplies, Squires-Sanders SS-1R, etc. John Hurst, KU6X, 2512 Euclid Crescent E, Upland, CA 91786 (714 981 6759)

WANTED - - Morse Tutor Datong, Model D70, which was sold in the country in the 1980's. The mailorder house in Michigan is no longer in business. The unit was manufactured in England. Richard D. Jeffery, W6JBB, 2330 Roundhouse Rd, Sparks, N.V. 89431 (702 356 9300).

WANTED - - U.S. Amateur callbooks from the Radio Club of America of 1909-1910. ARRL call directory of 1914-15. Coles of 1916, Department of Commerce 1913-14-15 and 1920-31. Radio Directory and Publishing Co of MYC of the early 20's. Consolidated of the 20's and the current Flying Horse 1920-26, 1935-36 and 41. Bbo Arrowsmith, W4JNN, 3505 Woodburn Rd, Annandale, VA 32003 (703 560 7161).

FOR SALE - - Don C. Wallace, W6AM Amateur Radio's Pioneer. Describing history of amateur radio as experienced by Don Wallace. Hardbound, 320 pp, 200 photographs, many in color \$29.92 + s&h, US \$3, Overseas \$5. California residents & sales tax. Wallace & Wallace, 11823 E Slauson Ave, Ste 38, Santa Fe Springs, CA 90670.

FOR SALE - - BC-221-N (Philco) #6695 freq meter 125-20 MHz with harmonics to 144 MHz; BC-22-AA same as above, both converted for 110VAC. Sparkomatic CB-23 CH, w/mike. NRI pattern generator, color bar/dot. Apollo power output 1000 W PEP with modulation percentage and dummy antenna meter. Unaware of current prices. Make offer. Must pick up, too heavy to ship. John J. Broadbrook 20 Overlook DR, New Milford, CT 06776.

WANTED - - replacement relay for SWAN Mark II linear amplifier - 3 contact double throw used in the linear, not the power supply. Willing to pay \$50 to anyone having one and willing to part with it. Mike Simpson, W6CRD, 3211 Julian Ave, Long Beach, CA 90808.

FOR SALE: Hammarlund HQ-120X receiver, looks good, works well! All original except for solid state rectifier and a filter capacitor or two. Needs crystal filter phasing variable capacitor. \$100 OBO. Marv Fagenson, K6HCJ, 2100 Sawtelle Blvd, #202, Los Angeles, CA 90025 (213 478 1777).

FOR SALE - - Western Union signs, Blue Racer, spy key, telegraph practice sets, sounders, brass keys relays, Western Union Clocks for your ham shack, crowfoot batteries, new and used vibroplexes. Don Wallaces's left opener with his name engraved thereon. Send \$1.00 for telegraph catalog. Mention your field of interest and include your telephone number. W. C. Hess, W6CK, PO Box 19, Pasadena, CA 91102

FOR SALE - - National Crystal Calibrator XCU-300, \$25; Heath Monitor Scope HO-10, \$25; Heather Linear Amplifier SB-200, \$274.00; spare 572, \$35.00; Dow-Key antenna relay, 110 V coil AC/SPDT aux sw, \$20.00; Collins Power Supply 516-F, no cabinet, but with tubes, \$80.00. HT-18 VFO NBFM exciter, 80-10 meters, \$25.00. You pay shipping! Fred A. Linn, W9NZF, 5608 Edgewater Dr, Cedarburg, WI 53012

WANTED TO BUY OR BORROW manual and/or schematic for a Singer/Gertsch SSG1 signal generator. Bill Thomas, W4CG, 149 Elizabeth St, Eufaula, AL 36027 (205 687 8966).

FOR SALE: Dentron Linear MLA-2500 with manua, mint, \$350.00. Heath Linear, SB-200, mint, with manual, \$300.00. Yaesu FT-401B & matching speaker, with manual, Needs finals - \$100. BC221AG Freq meter with AC pwr supply, calibration book and tech manual \$20.00. TS-323/UR Freq meter with AC pwr supply, calibration book (20-480 MHz), \$20.00. All items plus shipping costs! Al Schuermann, WOPFG, 2730 N Fountain, Wichita, KS 67220 (316 686 1222).

FOR SALE - - Books, OLD ELECTRIC, WW-II tech manuals, list for your SASE, Paul Hertzberg, 20 The Hemlocks, Roslyn, NY 11576-1703

WANTED - - Collins 75A4 with filters & speaker. Contact Richard W Arthur, WV2F, 1378 Division St, Charlton, NY 12019

WANTED - - Hallicrafter SX-88, SX-11. National SW-2, SW-3, SW-4, SW-5, SW-58, AGS, FB-7, HRO, NC-80 and so forth. Collins 75A-75A4, 51J speakers, Drake 1A, 2A, 2C, FS-4. Pilot Wasp, Johnson Valiant, Johnson 500. Steve Barnes, 848 N Silverwood, Upland, CA 91786

WANTED - - Copy of the "Radio Code Manual" by Arthur R. Nilson and published by McGraw-Hill. Bill Miller, K2GCE, 2171 Porterfield PL, Freeport, NY 11529-3116

FOR SALE - - Autographed new book #17. Autobiography of W8GJX, #793 Life Member, 1929. How ham radio held 16 professional careers together, each one a step up in both pay scale and knowledge. TITLE: "I NEVER SHOT A RABBIT" or 62 years in ham radio. \$17.95 plus \$2.50, tax and handling. Contact J & H Publishing Company, Box 232, Manistee, MI 49660. (616 723 9454). You may be in it! Helen H Schmuck, W8GJX, 273 Sioux Ave, Apt #502, Manistee, MI 49660.

FOR SALE - - HALCW4-6850 TELEREADER rtty, cw, ascii, baudot 12 volt portable, with power supply, built in monitor, keyboard-works great. All manuals included. \$295--for more information call Ray Chartier, W1RFE, 3637 SE 31st Ter., Ocala, FL 32671 (904 694 5439).

WANTED - - Ameco AT-1 transmitter. Also Blue Racer, Martin Jr., Zephyr, and Champion Vibroplex bugs. Robert Kurth, W5IRP 403 Mantooth Lufkin, TX 75901-2800.

FOR SALE, TRADE - - Old books, Audels, Hawkins, Army TM's manuals, parts, SASE for lists. Paul, K2DUX 20 The Hemlocks, Roslyn Est, NY 11576

WANTED - - a power supply to use with the Ten-TEC Triton 540, K4MR, 107 Holiday Ct, Lake City, FL 32055

CHAPTER NEWS AND MEMBER LETTER

COLORADO CHAPTER No. 58

KenMcMahan

1602 S Evanston St, Aurora, CO 80012-5776

At the well attended 979 persons) quatero spring meeetn of Chapter 58 held at the Gardens Inn, May, 1991, the following were elected to office:

Anna Belmonte, WOERR President
 Jim Blecha, WOKRE Vice President
 Ken McMahan WOTRO Secretary/Treasurer
 with the following as Directors: Rudy Fleischer, WONST; Frank Goddard, WOAJY; Bruce Henke, K6OU; Francis Pangle, WOBEG; Joe Tucker, WAOMTN.
 Pictured below, the officers, L-R, Bruce, K6ou, Frank, WOAJY, Jim, W9KRE, Anna, WOERR; Joe WWAOMTN; Ken WOTRO; Rudy, WONST and Slim, WOBEG.



Shown here is Anne, who has several firsts in the Denver area. She is our first YL President, and had had several other firsts. She was a member of the old Hamsters Club which became the Castle Rock Repeater group of which she is a charter member. She was Secretary of the Castle Rock group and also the first female member of the Denver Radio Club. And the first female member of Colorado Chapter 58 of QCWA. She also monitors the Castle Rock repeater 23.5 hours a day. She does take an occasional nap. Anne knows everyone who ever belong to Castle Rock and can quote names and calls.

One of the highlights of the evening was the presentation to Don Case, KA0ABM his 70 year certificate by Marshall Quist, AG0X, ARRL Rocky Mountain Director. After the presentation, Marshall gave a short synopsis of the antenna tower problem in Boulder County.

LETTER TO THE EDITOR

After reading W5EJ's editorial in the Summer edition of the QCWA Journal, a friend remarked that the tone was pessimistic if not downright alarmist. I replied that the article was probably not alarmist enough.

The recent field tests conducted by the FCC to observe amateurs operating should indicate that something's up. Any amateur-related activity carried out by the FCC runs counter to the Comissions's policy of benign neglect with regard to the amateur service. This hands off policy is officially known as deregulation: The thrust of Ted's editorial concerned possible reduced power output. This is a distinct possibility in light of the persistence of RFI problems and a bureaucratic mentality that concludes it's less costly to eliminate the effects of a problem than it is to attack its causes.

Any policy dependent upon "good will" and "self policing" is suspect to begin with. It doesn't work, and if you disagree, listen to the "good will" being exhibited by the rough and ready crowd on 20 meters or the oupouring of profanity and obscenity on 75 any night of the week. I think we will have to view the FCC as being merely an administrator and not the protector of amateur radio. Subjected to pressure from Congressmen whose constituents complain about RFI or an Administration that just might be willing to auction off electromagnetic spectrum to raise cash to reduce the federal deficit, the FCC will do whatever it considers to be in the national, not amateur interest. In his editorial Ted suggests that the Commission considers amateur radio an anachronism -- a service that has outlived its usefulness. I agree with his analysis. But I also feel there are some practical steps we can take to make the FCC dance to our tune for a change, or at the very least be aware that they can't change the song because they don't like the music.

For the first time since former U. S. Senator Barry Goldwater championed amateur radio in Congress some years ago, several U. S. representatives and senators have taken up our cause. I'm referring to the Amateur Radio Spectrum Protection Act of 1991, HR73 and S 1372. Material on the proposed legislation appeared in the August 1991 issue of QST.

Passage of a radio protection act will not only preserve our bands, but also send a loud and clear message to the FCC. Recognizing that Congress is interested in the Amateur may very well prevent the FCC from taking further actions to erode operating privileges. The first step in this process begins with our taking the time to write a short note to our U. S. representatives and senators.

Dan Davis, W8LUX
 1072 Snyder Rd, East Lansing, MI 48823

NEWLY ENROLLED MEMBERS**Membership Dues Schedule**

All new members are assessed a one-time fee of \$3 for enrollment costs

<u>QCWA dues for a 1 year period</u>	<u>\$15.00</u>
<u>QCWA dues for a 2 year period</u>	<u>\$25.00</u>
<u>QCWA Dues for a 3 year period</u>	<u>\$30.00</u>

Life Membership - \$225

Life Membership paid in 3 --80 dollar installments in a one year period - \$240

Family memberships for the second family member available. write HQ for Information

All dues payments to be made to QCWA, Inc. Irving, Texas

NEWLY ENROLLED QCWA MEMBERS

03-05-91	24,121	Peters, Bruce S	K3QBA	Rockville, MD	Carl Gray	W4ACM
	24,122	Bilger, Glenn R	W4OCC	Alexandria, VA	Carl Gray	W4ACM
	24,123	Shimshock, Robert A	K3USH	Rockville, MD	Carl Gray	W4ACM
	24,124	Plantz, Merritt A	WA0HFH	Alinsworth, NE	Bob Rudd	W0EUT
	24,125	Wiebolt, D. W.	KC53XH	Coupland, TX	Pike Wieboldt	-
	24,126	Harwidm Ken	WA5QZI	San Antonio, TX	-	-
	24,127	Shanney, William Jr	KG6GR	Torrance, CA	William Shamey	-
	24,128	Buehler, Paul William	W8SMN	Oregon, OH	Paul W., Buehler	-
03-06-91	24,129	Amaral, John C	W1VRP	Niantic, CT	Edward S Eby	KF1B
03-07-91	24,130	Anderson, Buehren D	N5CUQ	Fredericksburg, TX	-	-
03-08-91	24,121	Stanfill, William Earl	K44YCD	Colorado Springs, CO	-	-
	24,122	Mantor, David G	W9OCM	Anderson, IN	-	-
	24,133	Kleinhofer, Burk	W6LZN	Long Beach, CA	-	-
	24,134	Dudick, Robert L	K3KDK	Lewistown, PA	Dick Kerlin	K3AM
	24,135	Pollard, Randy O	AK5G	Houston, TX	-	-
	24,136	Dunn, Harold J	K9CNP	Auburn, IL	-	-
	24,137	Clark, Tom G	W5HFJ	Port Arthur, TX	Arthur Kay	W5APX
03-11-91	24,138	Tibbles, Walter T	N5QZH	Athens, TX	-	-
	24,139	Wiesen, Ronald R	WD8PNL	Cocoa, FL	-	-
	24,140	Morris, Wayne Ralph	WA7FOB	Butte, MT	Robert Corbett	W7BC
	24,141	Stewart, G. Alec	W3HRK	Pittsburgh, PA	Pete Backstrom,	W3DM
	24,142	Bullock, Jerry Allen	KN4VB	Memphis, TN	Henry Simpson	W4MI
	24,143	Johnson, Forrest O	K5LNI	Corpus Christi, TX	Henry Binz	W5HQ
	24,244	Duncan, Carol Ann	WA3CQU	Pennsburg, PA	Ray Bilger	W3TDF
	24,145	Schneider, William C	W2LJX	Fort Collins, CO	E. F. Hayes	W0JFN
	24,146	Legore, Clark	W0LGI	Blockton, IA	J. H. Robinson	W0RJZ
	24,147	Quan, Kahn	W6OEV	Monterey Park, CA	Sesaler, Richard R	K6GEF
	24,148	Downer, Haynie L	W4PNZ	Florence, SC	Robert D Lambert	W4BZX
	24,149	Reed, Edwin B	KC4QGO	Zephyrhills, FL	-	-
	24,150	St Louis, Roland Arthur, Jr	K2LKH	Geneva, NY	Walt Wiederhold,	W5OGZ
	24,151	Beard, Bruce H	K6LXK	Dallas, TX	-	-
	24,152	Dillman, Norman	N0JCC	Manhattan, KS	El Charlton	W5MD
	25,153	Webb, John B	K5ANN	Crowley, LA	Raymond Bilger	W3TDF
	24,154	Brown, Roy Chamberlain	WA2TWS	Flemington, NJ	-	-
	24,155	Berg, W Barton	K8IRC	Pengilly, MN	-	-
03-15-91	24,156	Rogers, John R	WA0OMA	St Louis, MO	John H Davison	W0ZFN
	24,157	Keller, George A Jr	W3SAP	Ocala, FL	D. A. Morick	W3NNT
	24,158	Keller, Josephine S	K3OAK	Ocala, FL	D. A Morick	W2NNT
	24,159	Huckins, Robert L	W6UPI	Ridgecrest, CA	-	-
	24,160	Bardwell, Donald Mijlton	WA5PRJ	Thibodaux, LA	-	K5DVQ
	24,161	Lelleid, John David	KA0DEZ	Colman, SD	-	-
	24,162	Wrocklage, Whulliam C	NM1B	Sebastian, FL	-	-
	24,163	Proft, Conrad R Jr	W0DIM	Crestwood, MO	-	-
	24,164	Roseman, Barry J	WA0LHK	Stilwell, KS	Bill McGrannahan	KOORB
	24,165	Rumbaugh, Richard L	WA5PIE	El Paso, TX	Patrick McAuliffe	K8QPZ
	24,166	Kellerman, Kenneth	K2AOE	Charlottesville, VA	Harry Dannals,	W2HD
03-19-91	24,167	Dolder, Gary E	N9DCQ	Waterman, IA	-	-
	24,168	Fast, Allen	VE7XZ	Victoria, BC, Canada	-	-

NEWLY ENROLLED MEMBERS

	24,164	Roseman, Barry J	WA0LHK	Stillwell, KS	Bill Mc Grannahan	KOORB
	24,165	Rumbaugh, Rick	WA5PIE	El Paso, TX	Patrick Mc Auliffe	K6QPZ
03-19-91	24,167	Dolder, Gary E	N9DCQ	Waterman, IL	-	-
	24,168	Fast, Allen	VE7XZ	Victoria, BC Canada	-	-
	24,169	Jug, Jakob	DL9IN	Helligenhaus, Germany	-	-
03-20-91	24,170	Dreifuss, Joachim	WA2GSY	Ocean, NJ	Harold Clanton	WB2CJE
	24,171	Rimer, Barry	WA2WAO	Kings Park, NY--	-	-
	24,172	Pearce, Albert E	H44AP	Guadal canal, Solomon Is	Ruth Chance	K5YL
03-21-91	24,173	Morrow, Lyle	W7KHZ	Mesa, AZ--	-	-
	24,174	Godek, Larry	W00GH	Gilbert, AZ	Gerry Higgins	W9INP
	24,175	Hester, Clyde Doyce	K5TX	Corpus Christi, TX	Henry Binz	W5HQ
03-22-91	24,176	Lewis, Dean Jay	WA0TKJ	Salina, KS	Jim Mc Kim	W0CY
	24,177	Delcambre, James M	W5GMO	New Iberia,	LAJ Warren Aubin	K5DVQ
	24,178	Zoltack, Norman	K3NZ	Schnecksville, PA	W P Van Horn	K3CP
	24,179	Wilson, Tim Bancroft	VE3FRW	Thornton, On Canada	John Zwaska	W4WKQ
03-25-91	24,180	Ensor, Douglas R	WA8RUJ	Ann Arbor, MI	-	-
	24,181	Moyer, Ken	WB4SNO	North Miami Beach, FL	Charles Cox	W4RSG
	24,182	Murphy, James K	KK6KZ	San Diego, CA	Robert Mc Donald	KE6VB
03-26-91	24,183	Anderson, Elwood	KE8CD	Petersburg, MI	Phil Valvo	WB8UWM
	24,184	Looper, Harrell J	W7AFK	Toledo, OR	Phil Smith	W7BFX
	24,185	Shultis, Donald	W080	Onsted, MI--	-	-
	24,186	Macionski, Lawrence E	WA2AJQ	Royal Oak, MI	Bob Taylor	W8CBA
	24,187	Teders, Herbert J	K9RRV	Naples, FL --	-	-
	24,188	Campbell, John William	W3BRS	Taneytown, MD--	-	-
	24,189	Sorrells, Jimmy R	WA9ABB	Findlay, OH	Bob Taylor	W8CBA
	24,190	Stavish, Thomas M	W3GRW	Woodland Park, CO	-	-
	24,191	Penneys, Robert	N3IXU	Newark, DE --	-	-
	24,192	Hetland, George Jr	K4HKS	Mc Lean, VA	Jack	W42C
03-27-91	24,193	Philip, Ronald M	VE7NS	Courtenay, BC Canada	-	-
	24,194	Kangas, Bernard E	WA7FFR	Portland, OR--	-	-
03-28-91	24,195	Seidman, Arthur H	K2BUS	Great Barrington, MA	Cabanillas	W6IL
	24,196	Convery, David W	NF7M	Nogales, AZ--	-	-
03-29-91	24,197	Silverstein, Stuart J	K3UEI	Harleysville, PA	William C Willmot	K4TF
	24,198	Cardwell, Gilbert P	W3FLJ	Honeybrook, PA	William Findley	W3FEA
04-03-91	24,199	Dewey, George M , Jr	W1QVK	Bradenton, FL	Wes Randles	W4COW
	24,200	Warner, Della	WB6SYM	San Pedro, CA--	-	-
	24,201	Warner, James	WB6SYN	San Pedro, CA--	-	-
	24,202	Zimmer, Robert	NV1X	Milton, VT--	-	-
	24,203	Corder, Dennis	W0FT	Selden, KS	Jim McKim	W0CY
	24,204	Levine, Michael I	WA2BLH	Deer Park, NY	Herb Gleed	W6FQ
	24,205	Langston, John H	AA5TG	San Antonio, TX--	-	-
	24,206	Smith, Bruce D	WB0FHX	San Antonio, TX	Herb Gleed	W6FQ
	24,207	Smith, Patrick D	WB0GEH	Lyman, WY	Herb Gleed	W6FQ
	24,208	Fairbanks, Earle T	W1WG	Shelton, CT	Stan Domorod	W1AKG
	24,209	Miller, John L	KL7IGZ	Sterling, AK--	-	-
	24,210	Bramwell, William N	W7QHC	Phoenix, AZ	G Higgins	W9INP
04-04-91	24,211	Nash, Harold	WE1KQ	uaker Hill, CT	Edward S Eby	KF1B
	24,212	Gust, Otto P	KK6CT	San Diego, CA--	-	-
04-05-91	24,213	Fine, Bernard	WD8C	Whitehouse, OH	Bob Taylor	W9CBA
	24,214	Edris, John H Jr	WA9IRH	Bluffton, IN	Blanche Randles	W4GXZ
04-11-91	24,215	Schwartz, Henry	S K8CWX	Lyndhurst, OH	Ed Stuewe	W8OXA
	24,216	Hatfield, Monte Clark	N4KMH	Robards, KY	Charles C McElhane	KI4BK
	24,217	Pollock, Jon M	K0YMQ	Olathe, KS--	-	-
	24,218	Halpin, William E	K1SMF	Jacksonville Beach, FL	-	-
	24,219	Page, Robert M	W4DVJ	Nashville, TN--	-	-
	24,220	Tyburski, John A	K2VPR	Springfield, VA--	-	-
	24,221	Laundry, Terrence H	WE1I	Nantucket, MA--	-	-
	24,222	Van Duzer, Myles W	WA9OMG	Streator, IL	Bernard G McGurk	W9OLF
	24,223	Goodwin, Harry P	N4OCR	Pensacola, FL	R D Hoffman	KK4KO
04-15-91	24,224	Brooks, Thomas William	KE1R U	nderhill, VT	-	-
	24,225	Brogia, Kenneth M	W9KVF	Urbana, IL--	-	-
	24,226	Robinson, Robert C	WA2MII	Bridgeport, CT	Robert Obert	W1UWV
	24,227	Ross, David M	KA6EPI	Santa Clara, CA	Ruth Chance	K5YL
04-16-91	24,228	Fay, Hamilton B	WE1Q	Milton, VT	-	-
	24,229	Fuller, Edwin M	WA5RHG	Benton, AR--	-	-
	24,230	Hasenstab, Ferdinand J	W3ZUG	Roaring Spring, PA	Herb Gleed	W6FQ
	24,231	Fritz, Kirby A	WA1EUM	East Greenwich, RI	George Slade	W1GOG
	24,232	Wilbrandt, Robert A	WA9OJS	Crystal Lake, IL--	-	-
	24,233	Clark, William S	KB0AUK	St Paul, MN--	-	-
	24,234	Harris, William M	W5YHR	N Little Rock, AR	-	-
	24,235	Menuto, Vincent	K3HHD	Erie, PA--	-	-
	24,236	Smith, Edward J	N2KIX	Ocean City, NJ--	-	-
	24,237	Barber, Philip Bruce	KL7D	Anchorage, AK	Charles H Sappah	KL7RJ
	24,238	Teclaw, Charles	NT3G	Wheaton, MD	Walt Brink	W3WPY
	24,239	Johnson, Chad	W3IKO	Millersville, MD	Walt Brink	W3WPY
	24,240	Smith, James P	K3UBC	Stevensville, MD	Walt Brink	W3WPY

NEWLY ENROLLED MEMBERS

04-18-91	24,241	Plitt, Fred	W3DCN	Gambrills, MD	Walt Brink	W3WPY
	24,242	Wyrrick, Charles L	KM4NZ	Springfield, VA	Walt Brink	W3WPY
	24,243	King, Glenn A	N5DFB	Conway, AR J	Phil Powledge	K5SVS
	24,244	Parker, Ray C	K5LJC	Little Rock, AR	Thomas A Spencer	W5IGM
04-19-91	24,245	Cole, Herman L	W5YDP	Little Rock, AR	J Phil Powledge	K5SVS
	24,246	Pisanov, Victor N	UA9OS	Novosibirsk, USSR	-	-
	24,247	Mc Coy, James C Jr	N3EI	Severna Park, MD-	-	-
	24,248	Griffith, David G Sr	K4JZE	Rollinsville, CO	Herb Gleed	W6FQ
04-22-91	24,249	Younglund, Oscar	W7NVX	Yakima, WA--	-	-
	24,250	Keating, William N	N1HUC	St Albans, ME	Philip M Young	W1JTH
	24,251	Wiley, Jim	KL7CC	Anchorage, AK	Charles H Sappah	KL7PU
	24,252	Kay, Opal A	N4SML	Shelbyville, TN--	-	-
04-23-91	24,253	Fogg, George E Jr	W2HXX	Seneca Falls, NY	-	-
	24,254	Hendricks, Gary	KD4AW	Hurdle Mills, NC-	-	-
	24,255	Deutsch, Ira G	WA1FNS	Boston, MA--	-	-
	24,256	Adams, J M	W5RJK	Houston, TX	Bill Pearre	K5MMP
04-25-91	24,257	Brubaker, Robert L	W7IYT	Bermuda Dunes, CA	Jerrie Stonier	K6INK
	24,258	Kuhar, William A	W3JWB	Bethlehem, PAA	C Bruner	W3TI
	24,259	Bruno, Peter J	WB2VVT	Larchmont, NY	Joseph P Bruno	WB2VVS
	24,260	Jett, Garland M Jr	WA3PPG	Pasadena, MD	Lee S Apple	W3EE
04-26-91	24,261	Grebe, Robert K	W3ZZX	Scottsdale, AZ -	-	-
	24,262	Rioux, Albert F	AB4GD	Homosassa, FL	Eunice Gordon	W1UKR
	24,263	Bird, Richard W	K0IRS	Eaton, CO	-	-
	24,264	Likes, Louis A	K0CSS	Camdenton, MO	Charles W Cramer	W0ZL
04-30-91	24,265	Zavrel, Robert J Jr	W7SX	Scotts Valley, CA	-	-
	24,266	Harrison, Gary R	WA0RWS	Bolivar, MO	Bill Mc Grannahan	K0ORB
	24,267	Stoebener, Heinz P	DL6IS	Heuchelheim, Germany	Albert Lienemann	DL9AR
	24,268	Hautsch, Hans-Juergen	Y24NN	Chemnitz, Germany	Albert Lienemann	DL9AR
04-30-91	24,269	Burdett, Beryl	NS8T	Harrison, AR	Leland Smith	W5KL
	24,270	Donaway, John W Sr	WB2JMK	Lewes, DE	John A Salin	W3FKT
	24,271	Jespersen, Ted	W2IF	Stony Brook, NY--	-	-
	24,272	Hattingh, Jan Johannes	ZS6BMN	Verwoerdburg, So Africa	-	-
04-30-91	24,273	Plantz, Roger E	WA00QX	Sidney, NE--	-	-
	24,274	Anderson, Warren O	K4JIY	Holiday, FL	Henry Mc Laughlin	W8OYV
	24,275	Wetzel, Hans	VE3MLL	Scarborough, ON, Canada	A L Barner	VE3FY
	24,276	Boyce, Michael L	K0COY	Kansas City, KS	Bill Mc Grannahan	K0ORB
04-30-91	24,277	Breaux, Richard C	N5RLM	Duson, LA	Lionel A Oubre	K5DPG
	24,278	Kir, David J	WA3DJG	Belle Vernon, PA-	-	-
	24,279	Peterka, Ronald	WA8OOH	Livonia, MI	-	-
	24,280	Novoa, David	KP4AM	Miami, F	-	-
04-30-91	24,281	Moore, Larry W	K9GFQ	Leo, IN	-	-
	24,282	Chitester, Everett D	WA8EYF	Garfield Heights, OH	-	-
	24,283	Goller, John C	K9UWA	Leo, IN--	-	-
	24,284	Worthington, Max G	WA7X	Salt Lake City, UT	-	-
04-30-91	24,285	Enot, John J	N8DKO	Redford, MI--	-	-
	24,286	Naberezny, John T	K2SIG	Sand Lake, NY	Ted Heithecker	W5EJ
	24,287	Vercut, George C	WA8RUF	Millford, MI--	-	-
	24,288	Sutton, Francis	W3SNN	Johnstown, PA--	-	-
04-30-91	24,289	Stengel, John P	WB4IUZ	Louisville, KY--	-	-
	24,290	Bandy, John E	KF4UP	Virginia Beach, VA	Harry Dannals	W2HD
	24,291	Mc Keown, Noel Keith	WB8QQC	Xenia, OH	Lew Mc Coy	W1ICP
	24,292	Harris, Charles J	WB2CHO	Santa Rosa, CA--	-	-
04-30-91	24,293	Solly, Peter E	VE3DFD	Oshawa, ON, Canada	-	-
	24,294	Geese, Robert	K8IOX	Cambridge, OH--	-	-
	24,295	Cantrell, William T	WA4GPA	Lilburn, GA--	-	-
	24,296	Berner, James	K8OSF	Hancock, MI--	-	-
04-30-91	24,297	Bruce, Harry D	WA4GKT	Madison, TN--	-	-
	24,298	Skinner, Jeff	NN7C	Indianapolis, IN	-	-
	24,299	Sundstrom, John L	WA0LIS	Fairview Heights, IL	Harry Dannals	W2HD
	24,300	Arnett, Stanley K II	AC8W	Port Huron, MI	Harry Dannals	W2HD
04-30-91	24,301	Kratz, Winston W Jr	KB0KK	St Louis, MO	Harry Dannals	W2HD
	24,302	Lambert, Paul	N8ABS	Chicago, IL	-	-
	24,303	Campbell, J Michael	N0CQL	Elgin, IL--	-	-
	24,304	Basscher, Thomas L	WA8URE	Grand Rapids, MI	Harry Dannals	W2HD
04-30-91	24,305	Levo, Paul	WA8KFB	Hillsboro, OH	Harry Dannals	W2HD
	24,306	Amundson, Richard E	WA0JFS	Des Moines, IA	-	-
	24,307	Richaey, Lee M	WA3FIY	Franklin, PA	-	-
	24,308	Klink, J Fred	KE9B	New Albany, IN	-	-
04-30-91	24,309	Cruse, Tom	W4TDT	Alexandria, VA	Bill Miller	K4MM
	24,310	Shipley, William T	N4WS	Cookeville, TN	-	-
	24,311	Chapoton, Greg	NA8V	Utica, MI	-	-
	24,312	Warren, Thomas J	K3TW	Temple Hills, MD-	-	-
04-30-91	24,313	Picard, Albert E	K4IQH	Ocala, FL	-	-
	24,314	Soldan, David L	N0IN	Manhattan, KS--	-	-
	24,315	Dresser, Ken	KK4L	Johnson ity, NY--	-	-
	24,316	Gansen, Edward J	WQ8A	Dayton, OH--	-	-
04-30-91	24,317	Kuhnert, Paul M	W8LOH	North Wales, PA	Harry Dannals	W2HD
	24,318	Gilliland, Charles A	WA0KDC	Hiawatha, KS	Harry Dannals	W2HD
	24,319	Mercure, Michael	WA9GAM	Zion, IL--	-	-
	24,320	Dearing, Wilbur	W5QN	Bonham, TX--	-	-
04-30-91	24,321	Wagner, Patrick A	WA9AAV	Shelbyville, IN-	-	-
	24,322	Skinner, Rodger	K4BKK	Parkland, FL	Ted Heithecker	W5EJ
	24,323	Hurray, Jack	W8JBU	Hinckley, OH--	-	-
	24,324					

NEWLY ENROLLED MEMBERS

24,325	Silinsky, Paul S	K3PS	Du Bois, PA	-	-
24,326	Fraser, Jerry K	W0WVO	Marine, MN--	-	-
24,327	Beadley, John Bruce	WJ0D	Huntsville, AL--	-	-
24,328	O'Brian, Ben H	K5AYX	Murphysboro, IL--	-	-
24,329	Gelber, Richard L	K2WR	New York, NY	Harry Dannals	W2HD
24,330	Barsky, Richard A	WA1GZY	Owensboro, KY--	-	-
05-03-91 24,331	Glenn, Rodney B	N9IDF	Wheeling, IL	-	-
24,332	White, Andrew B	K9CW	Urbana, IL--	-	-
24,333	Martel, Richard M	K6USH	Livermore, CA--	-	-
24,334	Bernheisel, David R	N2DPF	Rochester, NY--	-	-
24,335	Leslie, Adrain J	VE3BIQ	Welland, ON, Canada	-	-
05-06-91 24,336	Candelario, Cecil	NG3C	Reston, VA	Lew Bradley	W4SLP
24,337	Radding, Earl C	KD3IH	Seaford, DET	Allen Phillips	W3DOG
24,338	Taylor, James	W4PNM	Augusta, GA	-	K4PSW
24,339	Clears, Gene T	W9ZDT	Westmont, IL	-	-
24,340	Steinberg, William B	W6KSE	San Diego, CA--	-	-
24,341	Cannon, James M	KC7K	Portland, OR--	Lee S Apple	W3EE
24,342	Mullan, Joseph	W3RLR	Baltimore, MD	John Zwaska	W4WKQ
24,343	Pardue, Harry W	AA4GZ	Crestview, FL	-	-
24,344	Lauer, Lawrence	WB2UFO	Mc Henry, IL--	-	-
24,345	Breazeale, Jerry	K4FDP	Demorest, GA--	-	-
05-08-91 24,346	Von Bergen, Emil	W0NIK	Alliance, NE	-	-
24,347	Wehrli, Norman D	W5JPC	Athens, TX--	-	-
24,348	Esborn, Edward	K1UQE	Dayville, CT	Milton Chaffee	W1EFW
24,349	Malkisch, John C	K2AZ	Morris Plains, NJ	-	-
24,350	Tauson, Michael W	K3MXO	Pittsburgh, PA--	-	-
05-10-91 24,351	Othmer, Richard E	K0ATL	Ft Pierce, FL	Pierce Chancey	W4YYP
24,352	Barron, Jim	WB5AAA	Breaux Bridge, LA	El Charlton	W5MD
24,353	Raffaelli, Thomas	WB2NHC	Thornwood, NY	Harry Moore	W2JQS
24,354	McCordie, John P	WA9NWE	Towanda, IL	Larry Kennan	K9ORP
24,355	Hartwell, Ward James	K7GGQ	Yakima, WA	Floyd Reimenschnider	K7MGA
05-14-91 24,256	Young, Carl E	K5HKS	Thomas, VI	-	-
24,357	Davis, Brian M	W9HLQ	Tinley Park, IL--	-	-
24,358	Kearns, Henry R	WA8ROK	Broadview Heights, OH	Clyde Rothstein	W8QHM
24,359	Schrack, Gerd	WB8IFM	Dayton, OH	John E Schbert	W8WYH
24,360	Schwartz, Gary	K3OSK	Garden City So, NY	-	-
24,361	Johnson, Gordon W	WA6RNS	Riverside, CA	Arlo K Myers	WA6UDR
24,362	Rood, Loren K	KD4PN	Union, KS	Ralph Cabanillas	W6IL
24,363	Bova, Eugene R	W0WPD	Bailey, CO	Anna Belmonte	W0ERR
05-15-91 24,365	Mc Intire, Thomas F	KF0BH	Marshall Town, IA	Harry Dannals	W2HD
24,366	Gilman, Marlin E	WA0AUX	Earlham, IA	Harry Dannals	W2HD
24,367	Morey, Darrold W	K0LXE	Sioux Falls, SD	Roger Kehm	N0HCR
24,368	Galle, John L Sr	K0ILU	Windom, MN	Al Smith	W0PEX
24,369	Eberle, Frederick	K15EM	Red Oak, TX	Richard H Bauer	K5RB
24,370	Graeber, Herbert	K5HG	Bryan, TX--	-	-
05-20-91 24,371	Kiesel, Raymond C	K3RIZ	Lansdale, PA	-	-
24,372	Pendt, Robert H	K2HJH	Poestenkill, NY--	-	-
24,373	Preuss, Alan C	W4MGK	Boca Raton, FL--	-	-
24,374	Mendelson, Robert	W2OKO	Murray Hill, NJ	Andy Rau	W2IET
24,375	Funk, Ronald L	K3ZYT	Cape Canaveral, FL	-	-
24,376	Wilson, William D	K0GHI	Blair, NE	Bob Brenneman	W0UQJ
05-21-91 24,377	Krueger, Wolf	Y23HE	Eisenhuttenstadt, Germany	Al Leinemann	DL9AR
05-22-91 24,378	Theobald, Rex E	N8NWK	Caldwell, OH	-	-
24,379	Smith, Thomas C	WA0OFO	Raytown, MO	Dwight Sorensen	WA0ITU
05-23-91 24,380	Stone, Art	WA7MMG	Coeur D Alene, ID	-	W6RXD
24,381	Glaze, Tom	KC4SUS	Miami, FL	Arthur Rauch	W4VZ
05-27-91 24,382	Purdie, James L	WA0OBG	Albany, OR	Dick Fox	W7EFS
24,383	Shinn, H L	W6PFR	Ridgecrest, CA	-	-
24,384	Purdie, James L	WA0OBG	Forest Lake, MN	-	-
05-30-91 24,385	LaBumbard, Richard	WB2VWQ	Newfield, Y	-	-
24,386	Rosa, Earl J	W8CTY	Saginaw, MI	E. J. Ireland	W8HZF
24,387	Ivan, Thomas R Sr	KF7GC	Phoenix, AZ	-	-
24,388	Swanson, Scott V	K6PYP	Pacific Palisades, CA	-	-
05-31-91 24,389	Matthess, Wilbur L	W6JMT	Riverside, CA	Frank H Johnson	W6KLJ
24,390	Chilcote, Robert L	WA4FLR	Fayetteville, NC	Ethel Smith	K4LMB
24,391	Moore, Harry R	W5BXV	Athens, TX	Cecil Cammack	W5RRM
06-03-91 24,392	Dodson, Oliver Gregg	WB4DJM	Tampa, FL	Jim Gundry	W4JM
24,393	Trant, Roger B	KC6UZQ	Cathedral City, CA	Jerrie Stonier	K6INK
24,394	Taitt, Michael J	WA7VQE	Yakima, WA	-	-
24,395	Fitzpatrick, Lawrence J	K7VAS	Yakima, WA	Floyd	K7MGA
24,396	Waller, Patrick F	KG7NX	Yakima, WA	Floyd	K7MGA
24,397	Celani, Victor J	WM3B	Bethlehem, PA--	-	-
24,398	Goldman, Robert F	K6BD	Woodcrest, CAA.	K. Myers	WA6UDR
06-04-91 24,399	Shulgin, Gene G	UZ3AU	Moscow, USSR	-	W5EJ
24,400	Gohm, Tom	N7RV	Olympia, WA	Jim Walsh	W7LVN
24,401	Foglesong, Linda K	N7QAV	Kent, WA	Merle R McLaughlin	W7DNY
24,402	Foglesong, Marvin D	AL7E	Kent, WA	Merle R McLaughlin	W7DNY
24,403	Dayton, Fred	WA7TTD	Portland, OR	Jim Walsh	W7LVN
24,404	Schreiner, Richard M	AJ7U	Portland, OR	Jim Walsh	W7LVN
24,405	Bartsch, Gene J	WA5IZR	Banks, OR	Jim Walsh	W7LVN
24,406	Bittinger, John R	WA7FBW	Auburn, WA	Jim Walsh	W7LVN
24,407	Lehman, James E	KA7TGE	Kalana, WA	Jim Walsh	W7LVN

NEWLY ENROLLED MEMBERS

	24,417	Bledsoe, Lewis J	W4MHA	Knoxville, TN	J. V Giesler, Jr	W4TYU
	24,418	Thayer, Chester A II	WA3I	Wilmington, DE	Edward J White	WA3BZT
	24,419	Thacher, Coleman W	W1HZQ	Raleigh, NC	Walter Van Gieson	AB4DQ
06-10-91	24,420	Moore, Jack D	K4NE	New Braunfels, TX	Robert Osborn	WA5JDU
	24,421	Ralston, John R	K0QND	Kansas City, MO	-	-
	24,422	Bergan, Marlan D	N4GBL	Stuart, FL	W. R. Jochenisen	K4ZK
	24,423	Bergan, William R	NU4X	Stuart, FL	W. R. Jochenisen	K4ZKk
	24,424	Hineline, Robert J	KB8LAN	Perrysburg, OH	Robert N. Hanna	K8ADK
	24,425	Colquhoun, Arch	N4LMW	Venice, FL	Bob Bookwalter	W4NWF
	24,426	Iverson, John M	N9KYT	Palatine, IL	James Joun	K9PNG
	24,427	Dye, Walter	W8CTT	Barberton, OH	-	-
06-11-91	24,428	Millreany, Patrick A	WX7M	Wellington, NE	-	-
	24,429	Conner, Dewey Howard	K5MOY	Madisonville, TN	Henry McDonald	K4KUV
	24,430	Iacovazzi, Michael A	W1RQF	Bristol, CT	-	-
	24,431	Campbell, Alan	VE6QB	Edmonton, AB Canada	N Reidford	VE6NR
06-13-91	24,432	Susman, Barton M	K6UNRDesert	Hot Springs, CA	Stoney Stonier	WA6PEX
06-14-91	24,433	Perron, Ken	W5JYM	Houston, TX	Lyn Ohlson	W5RYX
	24,434	Smart, Robert T	W5TBV	Georgetown, TX	Ray Robert	W5ZMI
	24,435	Dow, William B Jr	W5VRI	Carrollton, TX	Pete Ohlson	W5LVM
	24,436	Barnes, Joe S	K5FZH	El Paso, TX	Pete Ohlson	W5LVM
	24,437	Barnett, John Jr	K5GYU	Mesquite, TX	Pete Ohlson	W5LVM
	24,438	Glueck, Howard W	K5ZUA	Austin, TX	Pete Ohlson	W5LVM
	24,439	Pfranger, Delavan	W0DRO	Plano, TX	Julia Young	W5JFJ
	24,440	Grimes, Ronald T	WA5SCE	Houston, TX	Lyn Ohlson	W5RYX
	24,441	Edwards, Richard Harry	W5AKD	Garland, TX	Harry Moore	W2JQS
	24,442	Paulsen, Paul E	W0PBZ	Albuquerque, NM	Pete Ohlson	W5LVM
	24,443	Wolf, Orville E	WA4IXN	Weatherford, TX	Pete Ohlson	W5LVM
06-13-91	24,444	Hadley, Paul Gene	KG5RN	Richardson, TX	-	-
	24,445	McElhannon, Dennis T	WA5CAX	Fort Worth, TX	Lyn Ohlson	W5RYX
	24,446	Little, John E	W5FFY	Fort Smith, AR	Pete Ohlson	W5LVM
	24,447	Stanton, Charles	W5LBU	Albuquerque, NM	Pete Ohlson	W5LVM
	24,448	Lathrop, Robert M	W5ROE	Garland, TX	Pete Ohlson	W5LVM
	24,449	Williams, Gerald R	K5BWT	Hutchins, TX	Lyn Ohlson	W5RYX
	24,450	Wittliff, Ted	WA5MOD	Richardson, TX	Pete Ohlson	W5LVM
	24,451	Voss, Robert	N4CD	Plano, TX	Pete Ohlson	W5LVM
	24,452	Hinrichs, Robert	WM6H	Dallas, TX	Pete Ohlson	W5LVM
	24,453	Kuban, Joe	W5LU	Fort Worth, TX	Jack Floyd	W5DXR
	24,454	Dwiggins, Robert II	WA5IMZ	Midland, TX	Julia Young	W5JFJ
	24,456	Watson, Thomas J	NQ5C	Thrall, TX	Bob Ray	W5ZMI
	24,457	Parkin, Dudley M	WA5SVL	Houston, TX	Julia Young	W5JFJ
	24,458	Price, James M	K5ABW	Arlington, TX	Julia Young	W5JFJ
	24,459	Richmond, Cortland, E	KA5S	Burleson, TX	Pete Ohlson	W5LVM
06-17-91	24,460	Rarick, Harry C	W3KR	West Lawn, PA	Albert J Barlier	W3UQC
	24,461	Kortokrax, Kris	WZ9T	Cedar Lake, IN	-	-
	24,462	Kenney, Bob	KC1RU	Morris, CTAl Cohen	W7FXQ	-
	24,463	Folts, Alexander Jr	WA4TWI	Remington, VA	-	-
	24,464	King, John K	W9KXQ	Greenville, IL	Jerry Todd	W9ATS
	24,465	Maddox, Joseph H	W0EQ	Colorado Springs, CO	El Charlton	W5MD
	24,466	Dunkel, Sandra I	K7OZY	Seattle, WA	-	-
06-20-91	24,467	Taylor, Craig	K9CKA	Marshfield, WI	R E Baird	W9NN
	24,468	Berger, Byron Elvin	N8NF1	Canton, OH--	-	-
	24,469	Hallgrimson, Gerald P	WL7BWD	Anchorage, AK	Roy Gould	N6GM
	24,470	Koch, Eric N	NFOQ	St Charles, MO	Joy Underdown	W0OGS
	24,471	Stallions, Leroy	K9IEY	West Frankfort, IL	-	-
06-27-91	24,472	Adrain, Erle Keys Jr	KB5JQX	Boerne, TX	Stoney Stonier	WA6PEX
	24,473	Garrett, Robert E	NU2P	Binghamton, NY	-	-
	24,474	Kommers, William J	WA3BNA	Venice, FL	-	-
	24,475	Lockin, George W	W9KAC	Benton, IL--	-	-
	24,476	Fife, Walter Max	K1VJI	Stockton Springs, ME	Len Bodman	K1NBG
	24,477	Phillips, Robert C	N4OZN	Zephyrhills, FL	-	-
	24,478	Gomolak, Gerald Joseph	KC1BL	Cincinnati, OH	-	-
	24,479	Brown, Robert Jr	K6RLT	Cedar City, UT	-	-
	24,480	Nankervis, Geoffrey C	KF7ZV	Nedford, OR	Gene White	K7YQM
	24,481	Lentz, Daniel A	K5DEI	Metairie, LA	-	-
	24,482	Meyers, Harry J Jr	K5VPH	Tyler, TX	Cecil Cammack	W5RMM
07-01-91	24,483	Hunt, Christina M	W0YMW	St Petersburg, FL	J Fred Strom	K9BSL
	24,484	Gifford, Mac	WA3EXX	Sewickley, PA	-	-
	24,485	Kunkee, Harold E	KOKTZ	Lincoln, NE	Elden Miller	W0KVM
	24,486	Haube, James C	W3OER	Tarentum, PA	-	-
07-02-91	24,487	Perkinson, Joseph E	KC4TEK	Rossville, GA	-	-
	24,488	Bubbers, John J	W1GYD	Winchester, MA	-	-
	24,489	Wolczak, Frank M	WA0IWF	Omaha, NE	John W Ferrel	W0YDV
	24,490	Lile, Ronald E	K0RL	Quincy, IL	John Ellison	K0RL
07-08-91	24,491	Hollowell, Mary Louise	W9OAD	Paris, IL	Don Hollowell	W9UU
	24,492	Buehler, George C	WA5IHF	Dallas, TX	John L Crist	WA5RSS
	24,493	Thompson, Harold R	KJ4KR	Knoxville, TN	J V Giesler Jr	W4RYU
07-10-91	24,494	Storm, Richard C	SM5BVU	Akersberga, Sweden	Kirk Sanderson	W8WNA
	24,495	Laperle, Gerard C	K1RIX	Colebrook, NH	-	-
	24,496	Smith, Leroy E	WB0LTV	Hot Springs, SD	-	-
	24,497	Bartlett, M G Jr	W5UHZ	Beaumont, TX	-	W5MSX
	24,498	Jacova, Philip Della	AC4GG	Lake Worth, FL	-	-
07-11-91	24,499	Wilson, Thomas E	KA2EER	Greece, NY	Walt Brink	W3WPY

NEWLY ENROLLED MEMBERS

24,500	Jones, George David	WB2YLR	Troy, NY	Walt Brink	W3WPY
24,501	Mc Carthy, Gerald E	AA2CQ	Penn Yan, NY	Walt Brink	W3WPY
24,502	Roby, Carl L Jr	WB2TCV	Columbiaville, NY	Walt Brink	W3WPY
24,503	Ellis, Carlton A	KA2Y	Rochester, NY	Walt Brink	W3WPY
24,504	Miller, Fred J	WO2P	Ontario, NY	Walt Brink	W3WPY
24,505	Porter, Gil	W1GP	Rochester, NY	Harry Dannals	W2HD
24,506	Mc Carren, William J	K2LV	Bronxville, NY	Charles Cohen	W2FQ
24,507	Crooks, Robert J	W2CHB	Franklinville, NY	Walt Brink	W3WPY
24,508	Stull, Harold L	NR2E	Corning, NY	Walt Brink	W3WPY
24,509	Sheedy, Patrick M	WA2DHB	Wayland, NY	Walt Brink	W3WPY
24,510	Jones, Gordon Jeffrey	WB2LRU	Bombay, NY	Walt Brink	W3WPY
24,511	Hanchett, George	W2YM	Summit, NJ	Walt Brink	W3WPY
07-12-91 24,512	Anderson, Paul E Sr	N4VHO	Naples, NC	-	-
24,513	Weidner, Phil Stanley	K4NJM	Cincinnati, OH	El Charlton	W5MD
07-15-91 24,514	Magnusson, John E	WOAGD	Lincoln, NE	Charles C Miller	W0KVM
24,515	Allen, Ronald H	KB3QM	Bethel, DE	Lester H Allen	W2CCO
07-18-91 24,516	MacLeod, Mervyn E	N2KWF	Bloomfield, NJ	Robert W Potter	WA2ALQ
24,517	Le Blanc, Bernard	VE2MS	Montreal, PQ	-	-
24,518	Morgan, Joseph W	W6BCZ	Carefree, AZ	-	-
24,519	Brockol, Kenneth H	WA2FPB	Neptune, NJ	-	-
24,520	Larson, Curtis W	WA6RYK	Riverside, CA	Sam Virzi	K6RXX
07-22-91 24,521	George, Mary Jean	WB5FQX	Port Arthur, TX	W D George	WA5BFF
24,522	Frankxman	KF8JB	Cincinnati, OH--	-	-
24,523	Quattrone, Joseph A	WA5NRZ	Brushy, LA	Albert Heine	W5OVV
24,524	Robinson, Muir F Jr	W8QK	Angleton, TX	El Charlton	W5MD
07-23-91 24,525	Friedrich, Bernd	WD8JTX	Mainza, Germany	-	-
07-25-91 24,526	Harrell, A V	W4OUN	Clarkston, GA	-	-
24,527	Lies, Jay A	K2OP	Wichita, KS	Del Patterson	W0JCY
24,528	Rogers, Norman F C	W0AZQ	Omaha, NE	Elden C Miller	W0KVM
24,529	Young, J Ray	K9RRP	Salem, IL	-	W9CJW
24,530	Sims, R Vincent	WA5GBH	Claremore, OK--	-	-
24,531	Henry, Alice T	W3CUY	Coatesville, PA	Woddy Sbei	W3TTW
07-26-91 24,532	Bush, Elmer R	W3FVT	Bethlehem, PA	Roy Bilger	W3TDF
24,533	Johnson, Clark A Jr	K9IDB	Greenville, IL	-	-
07-29-91 24,534	Kiss, Robert	AA2CV	New York, NY	-	-
24,535	Hively, George	WA6YEA	San Pedro, CA	Gene M Stephens	KA6HOQ
24,536	Whitley, B J	W5MBT	Houston, TX	-	-
24,537	Bixler, Richard M	WA7DKF	Beaverton, OR	-	-
24,538	Heid, Peter R	K6JQE	Solana Beach, CA	-	-
24,539	Baucom, James K	K4CQG	Raleigh, NC	-	-
24,540	Huston, Terry L	W8FK	Morgantown, WV	Mike Baker	W8CM
24,541	Nugent, Maurice J Jr	N8OMS	Warren, MI	-	-
24,542	Nakatsui, Hiroaki	JA4ENN	Tokyo, Japan	Esther Given	W6BDE
24,543	Graham, Gary L	WA0CQA	Hutchinson, MN	-	-
08-01-91 24,544	Drake, Frank E	WA9SBV	Moline, IL	-	-
08-02-91 24,545	Myjak, Mitchel H	K4HXN	Lexington, SC	C Edward Stone Jr	W4PT
24,546	Nelson, Larry D	KN0KY	Lincoln, NE	Elden C Miller	W0KVM
24,547	Millward, Thomas W Jr	WA5ALP	Umpire, AR	-	-
08-06-91 24,548	Griffin, Glenn V	AA5ZA	Turrell, AR	-	-
24,549	Schneider, Thomas J	K7EAU	Bellevue, WA	-	-
24,550	Goodwin, Lorne R	VE6EZ	Alberta, Canada	C Tyrrell	VE6PV
24,551	Kokaji, Kazuo	JA3KWJ	Nara, Japan	-	-
24,552	Guenther, Charles	N1OC	Kirkwood, MO	-	-
24,553	Swearingen, Paul	W9PJF	Benton, IL	Wayne Dorris	W9KSU
24,554	Kabuss, Norb G	W6BWU	Palm Springs, CA J	errie Stonier	K6INK
24,555	Gottlieb, Jesse	KA4EAA	W Palm Beach, FL	R Mc Dow	W4KOG
24,556	Wilkie, Hwnry E	K3AZH	West Grove, PA	-	-
08-08-91 24,557	Fischer, Hans	DJ2EJ	Reiskirchen, Germany	-	-

Please check the mailing label
on this Journal. If there are errors
notify HQ to make corrections!

CORRESPONDENCE

Days do pass, but memories are forever!

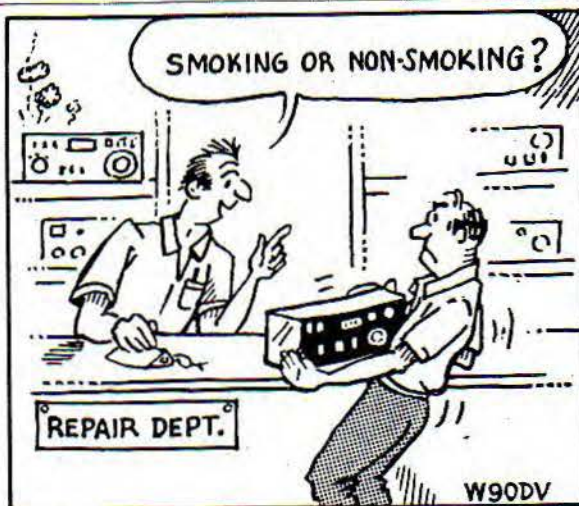
Arthur M. Monsees, W4BK
420 Bay Ave, Apt 1521, Clearwater, FL 34616

Dear Ted - it seems like old times when I sit down at this typewriter and visit with you for a while. Those were the old days when you and I could engage in a few elbow-bending activities and observe a down-to-earth attitude adjustment hour!! And, there were Lew Sieck, K4NE, Buck Lewis, W4BV and W5NC, pals from Texas who always enjoyed an occasional highball. Those fellows are long gone now.

You deserve some sort of medal for staying on the job as long as you have. Board members have come and gone, yet you have continued and are now the sole survivor after I was elected to the Board in 1977.

As you probably know, I am married again about three years ago and the xyl is an Advanced Class ham. I hope to sign her up for QCWA when 22 more years have elapsed. God willing! It has been my pleasure to sit and visit for a while. Ruth and I hope to meet you at the 1993 QCWA Convention in St Petersburg!

Editors comment: Art, your words do bring memories of wonderful times spent together - my trip to your QTH, the Convention there, and the many hundreds of letters dealing with QCWA business through the busy years when you were doing the Wells Fargo work for QCWA! I shall treasure them all. From the bottom of my heart, the work for QCWA has brought me more happiness, frustration and friends that anyone could possibly conceive. I would not change a minute of it given the chance. Like you, God willing, lets have a highball when they sing Auld Lang Syne on December 31, 1999! Certainly I will be watching for the two of you in St Pete!

**Thoughts on Science for Citizens**

I read an article in the QCWA Journal for Summer, 1991 that has the above caption. I really did enjoy those comments by Tim Yoho, WA3D. I was especially impressed by the comment " - - - maybe its time for another Sputnik scare." After giving that comment some thought, I'm already scared.

It occurred to me that we're going into world competition. We're going to have to compete with populations greater than ours. Most of them don't know you can't work but 40 hours a week. They think you have to work all the time. They don't know about "take home pay" they just know about "take home food." If we are going to be competitive we are going to start graduating 100 engineer scientists to 10 lawyers, and that is just the reverse of our present engineer to lawyer ratio. There is no reason that QCWA shouldn't be active in promoting some of the suggestions made by Dr. Yoho.

We suggest you get the Spring Edition of the Journal and review the Doctor's suggestions. Don't forget he is a ham, WA3D. He has been thinking on this subject for 17 years. Let's get active. WE can generally follow the recent activity of the ARRL. They are beginning to encourage and promote school activity. We should do the same. Retired QCWA members should make good school teachers, teaching courses in amateur radio. Many of these retired QCWA people would make excellent volunteer examiners. This activity would be good for QCWA, its members and for the nation.

We mentioned world-wide competition a few comments ago - world wide competition is a genteel way of saying the world is getting ready for a free market economy. That is a dog-eat-dog economy. Think of Saddam Hussein accumulating his stock pile of nuclear devices. Think of all of the nuclear devices Russia and the U S accumulated during the cold war. The cold war is over they say. If you consider history on a world-wide basis, there has always been preparation for a hot war: That is when a hot war wasn't going on. Scientists created this nuclear fire that we can deliver anywhere, anytime. We made the first delivery. The scientists were on our side and we had the resources. Now there are other countries that can make a delivery of fire and there are still others that want to get in that position - IRAQ.

The best thing we can do is create an environment that fosters science and engineering. We better get as interested in them as we are in sports. The daily newspaper should have a science section that is equal to the sports section. We better see that physicists, chemists, engineers and technicians are in the papers all of the time, and some of the top notch technical people should have popularity and salaries equal to a good pitcher or even a quarter-back. As I recall, Dr. Einstein once said he could have made more money as a plumber!

A substantial contribution to that technical environment can be made by QCWA and amateur radio. I'm thinking that QCWA had better take some action on some of Dr. Yoho's suggestions!

ENVIRONMENTAL MATTERS

"THE ELEMENTARY CHEMISTRY OF ACID RAIN"

by Howard T. Francis, W9NHM

One need not have extensive chemical knowledge to appreciate the "acid rain" problem faced in many parts of the world. It is necessary, however, to understand the basic concepts of "acidity" and "alkalinity" on our water based earth, since both living and inorganic systems are intolerant of extremes in either direction.

First of all, water itself is by definition "neutral". That is, it is neither acidic nor alkaline. Pure water consists of a molecule formed of two atoms of hydrogen and one atom of oxygen, written H_2O or HOH . The latter formula is the more useful in visualizing the acid base concept. A few water molecules spontaneously break up into a "hydrogen ion" and a "hydroxyl ion". As long as the water is "pure", i.e. contains no other chemicals that can affect the H^+/OH^- ratio, the number of free H^+ particles is exactly equal to the number of free OH^- particles. This equality is the very essence of the concept of "neutrality."

However, if any chemical substance is added to the water that causes the concentration of H^+ ions to rise above that derived from the water alone, the water becomes "acid". How acid it can become depends entirely on the chemical added; the acidity can range from the neutral value given above to several million times as high!

Similarly, if a chemical is added that causes the OH^- concentration to rise above the neutral level, we say the water is made "alkaline".

Because of the extreme ranges of acidity and alkalinity that can exist, chemists have devised a logarithmic scale for the hydrogen ion concentration, much as we hams use the dB scale to indicate power levels. The chemists define a term called "pH" as the logarithm (base 10) of the reciprocal of the hydrogen ion concentration. The latter is in units of grams per liter. In pure water there is 1×10^{-7} g/l of H^+ , so the $pH=7$. Values below 7 indicate an acidic state, while values above 7 indicate an alkaline state.

To illustrate the extremely wide range of pH values that can exist, even in living things, our blood has a pH near 7 while our stomach has a pH near 2, which tastes quite acid if it perchance comes back up. So the interior of our stomach is about 100,000 times more acid than our blood.

Further, every living thing on the planet has its own chemical systems, whether it be a cold-blooded frog, a warm-blooded mammal, or a sugar maple tree, all are water based and therefore acid alkali sensitive. The pH values that the organism maintains in various parts of its structure in order to sustain life can be narrow or wide (our blood pH must stay very close to neutral or we are in grave danger.) Elaborate control systems are built into each organism to ensure that the pH stays within viable limits. In most cases the living animal or plant can accomplish this control even when its external environment swings through much wider limits for reasonably short periods of time.

But this is where the problems arise with the environment. If the pH value of soil is persistently high, some plants get along fine,

others will not live. Clover, for example, likes high pH soil. Did you ever notice how clover thrives at the edges of a newly built road where crushed limestone (alkaline) was used in its construction? Similarly, many of the conifers prefer slightly more acid soil, which ties in with the acidity generated by decomposing pine needles and other foliage.

Even more sensitive than the soil, however, is the water in our lakes, especially small lakes. The internal system of a fish or other lake animal must be kept at a pH level set by nature, and fairly narrow, just like us. When we burn coal containing high levels of sulfur, the sulfur is converted to sulfur dioxide. This combines with water in the atmosphere to form sulfurous acid. In the presence of atmospheric oxygen the sulfurous acid is gradually converted to sulfuric acid. Sulfuric acid combines vigorously with water, so it is washed out of the atmosphere with rain, and falls wherever the wind has carried it.

Now if this acid rain falls on a marble statue in the park, it etches the stone, gradually destroying General Sherman and his horse. If it falls into a lake that has a lot of limestone cliffs around its perimeter, the stone neutralizes the acid at a steady rate that is sometimes fast enough to prevent the pH of the lake from going down, and no damage results!

However, if the lake doesn't have any limestone (or other slightly alkaline buffering material) the pH level of the lake will go down, eventually to acid levels that the fish, animals and plants simply cannot handle via their own internal chemical control systems. They just die gradually, and the lake may lose virtually all life.

This brief account of acid rain can by no means treat all aspects of the problem. The main points I want to get across are:

1. Sulfuric acid is produced by burning high sulfur coal, and is a major cause of acid rain.
2. Nitrogen containing acid (derived from hydrated nitrogen oxides) are also a cause of acid rain. These oxides are present in the exhaust gasses of engines and power plants.
3. Whatever the source, the wind transports the acid for many hundreds of miles (far enough to aggravate our Canadian friends).
4. Lakes are the major at risk systems of the environment. Some are self protecting through built in antacid materials and some are not.
5. The problem is subject to control. Test lakes that have been deliberately acidified until virtually dead have recovered dramatically when the acid addition was halted.
6. Forests also show the deleterious effects of acid rain. In Europe, the Black Forest shows loss of both evergreens and deciduous varieties.
7. And finally, just to let you know that Nature is a friend of Murphy, the fish that are most sensitive to acid in their water are small mouth bass, brown trout, rainbow trout, lake trout, walleye and Atlantic salmon. But yellow perch, bull heads, sunfish, northern pike, and brook trout are relatively tolerant.

Howard may be contacted at
107 Walnut St
Park Forest, IL 60466

AMATEUR RADIO SATELLITE NEWS - W5IU

NEW SATELLITE STATUS -

Another new satellite is in orbit and operational! UoSAT-OSCAR-22 (UO-22) was launched by an Ariane launcher from Kourou, French Guiana, at 01:46:31 UTC on July 17, 1991. Separation from the launcher occurred at 02:05:51, and that event signaled the start of the efforts of the University of Surrey Team leading to the commissioning of the new satellite. Within the following very intensive week, software was loaded, health of each system was verified, spacecraft attitude was brought under control, and major systems were declared operational. The first images from its CCD camera were of Italy and rivaled those taken with the low altitude weather satellites. This new "bird" serves two masters. First, it serves as a non-profit store-and-forward electronic mail box for SatelLife, an organization of health professionals interested in providing medical communications to developing countries. Initially, its HealthNet operation will link five African medical schools with each other and the rest of the world. Second, it serves the Amateur Radio community as a bulletin board and experimental resource. Its CCD camera has already proven very interesting. In the Amateur Radio service it is a "listen only" bird and will not be used as a store-and-forward device. It will, however, support the "hole filler" feature of the PACSAT Broadcast Protocol to make it an efficient bulletin source and to permit more efficient broadcast of the CCD imagery. This new "bird" is already a valuable addition to our list of active Amateur Radio Satellites. It brings the total of active Amateur Radio Satellites to 13. Fourteen if you count the Soviet Space Station MIR. As you may have guessed, this is another of the "Digital Satellites" and its 9600 baud FSK downlink is on 435.120 Mhz.

Since last report, much progress has been made toward the commissioning of AO-21. Control has been regained over at least the mode B linear transponders and some of the beacons. An experimental schedule has been worked out to permit further investigations leading to bringing the RUDAK transponder online. I have used the linear transponder on several occasions, including Field Day, with great success and it is a real pleasure to operate in its relatively strong signal environment. Compared to AO-13, its two meter downlink will "knock your socks off." Its 70 cm uplink is very sensitive and it can be easily accessed even when it is running with a 12 db pad in its uplink receiver. Everyone is keeping their "fingers crossed" hoping the RUDAK transponder also becomes operational soon.

Activity on RS-12/13 still continues in mode K as noted in the last report. More and more folks are finding out about its ease of use. A few of the Fifteen Meter DXers are even beginning to learn that they are being heard on Ten Meters as well. Due to the low amount of Doppler generated with a fifteen meter uplink and a ten meter downlink, it is possible to use a single HF transceiver on this "bird" if you are careful. This single transceiver would have to be capable of transmitting on 15 and listening on 10, but it would not have to do both simultaneously. When using this technique, it is helpful to announce the frequency of your 15 meter uplink as an aid to other stations that may want to work you. This technique even lets you use only one antenna provided it has both 15 and 10 meter capability. Of course it is very helpful if the rig can automatically switch between the 15 and 10 meter bands. By all means try this "Easy Bird" technique if you only have an HF station and want to taste the "Wonderful World of Amateur Radio Satellites."

MIR -

Activity continues aboard the Soviet Space Station, MIR. U2MIR has returned to Earth, but he has been replaced by U5MIR. U5MIR has been very active on Packet Radio with many stations working direct and to the Packet Mailbox, U5MIR-1. Signals are strong and competition is heavy on most passes. The Mailbox runs quite a bit of the time. The Cosmonauts have expressed a desire to receive more "news" via the Mailbox and other contacts. They are working voice also. One of my neighbors, KX4Y, made a voice contact with them on 11 Aug 91. So far no reports of activity on 70 cm have been heard.

Helen, GB1MIR/U, made the trip to MIR and back OK. Reports are sketchy in the US, but I understand the educational involvement in the UK went well. In October, an Austrian Ham/Cosmonaut will make a visit to MIR and operate on the Ham bands. Again, education will play a big role in this visit.

As a side light, the Fort Worth Museum of Science and History is hosting an excellent exhibit, SOVIET SPACE, until the end of this year. If you are in Fort Worth, TX, between now and the end of the year, don't miss it. As this is being written, AMSAT, with the help of Tandy Corp. is in the process of integrating Amateur Radio Satellites, Weather Satellites, MIR, and Amateur Radio in general into this exhibit. With any kind of luck, approximately 800,000 people will see this by the end of the year. Come see us and listen for us on the "birds," especially the Russian "birds."

PHASE IIID -

Phase IIID is on the move at last. ESA recently announced that we have a ride aboard an Airane 5 in October 1995. Selection of a launch opportunity was needed to establish the satellite physical configuration. Phase IIID will take on the shape of a large Doughnut. It will be 3.2 meters in diameter, 0.65 meters high, and will weigh 500 kilograms. The Doughnut Hole will be the adapter ring between the launcher and the primary payload stack. This adapting must support 2.5 metric tons. As mentioned last time, emphasis will be placed on improving the link margins by 10 to 15 db through additional ERP on the satellite. The Transponder Suite has not been settled on yet, but the consensus is that all current AO-13 modes will be present along with several other functions ranging from 10 meters to 24 Ghz. This "bird" presents the greatest challenges AMSAT has undertaken so far. The challenges are technical, financial, and schedule. Watch AMSAT News Service and this column for news of how you can help.

OSCAR ZERO -

Our oldest Orbiting Satellite Carrying Amateur Radio is OSCAR ZERO. This Satellite was used successfully for demonstrations at 1296 Mhz and 10 Ghz during the Central States VHF Conference held at Cedar Rapids, IA, the last weekend in July. In case you are wondering, OSCAR ZERO is the Moon / and the activity was Moonbounce. This was only the second time I have been involved in any way in Moonbounce activity and I was most impressed. Who would have thought we would be working Moonbounce on 1296 and 10 Ghz from a hotel parking lot at 3 o'clock in the morning. I wonder what the other guests at the hotel thought about our sanity? The very idea, grown men "baying at the moon" at 3 o'clock in the morning. The most unusual part of this operation for a OSCAR 13 person was the "Libration Fading" on the 10 Ghz signal. This effect is due to uneven doppler spread across the surface of the moon and actually sounds like Aurora propagation on 2 meters. Another description that may mean more to some of our fellow QCWA members is that it sounds like an old "Spark Gap Rig." Kind of interesting that we have advanced right back to the "Spark Days." In the "Spark Days" who would have dreamed that we would ever bounce radio signals off of the surface of the Moon?

Pardon this digression from Amateur Satellites, but there are many opportunities to broaden your RF horizons out there and the technology is available to build equipment for microwave frequencies now easier than for HF years ago. Conferences like the Central States VHF Conference and the upcoming Microwave Update in Arlington, TX, are excellent places to learn about advances in the technology available to help you. Proceedings of meetings like these are available from ARRL and are good substitutes if you can't make the Conferences in person. Central States VHF Conference is an annual affair and next years meeting will take place in Kerrville, TX, in July. Put these meetings on your calendar. Microwave Update is in mid October 1991.

AMSAT MEETINGS -

The annual AMSAT-UK SPACE COLLOQUIUM was held at the University of Surrey in England on the same weekend as Central States VHF. I couldn't be in two places at the same time this year and for financial reasons, Cedar Rapids, IA, won. However, approximately 150 satelliters from 21 different countries made it to Surrey this year. There were 42 papers presented with the bulk of the interest centered around the new satellites. The final stages of commissioning of UO-22 were in progress during the colloquium and many of the papers presented were about future "birds." If all of the projects come to fruition, we will see new satellites from France, Italy, Israel, Korea, UK, South Africa, and the PhasellID project from a cooperative effort of many countries. The first half of this decade promises to be very busy in the Amateur Satellite business.

AMSAT-NA will hold it's annual SPACE SYMPOSIUM at the LAX Airport Holiday Inn on November 8-10, 1991. Full details on this meeting will be published in the next AMSAT JOURNAL and are also available from AMSAT Headquarters at (301)589-6062. This meeting is the premier Amateur Radio Satellite meeting in the USA and usually has about the same attendance as the AMSAT-UK meeting but with delegates from less countries due to the differences in travel. Even if you are a "Satellite Beginner" please feel free to attend these meetings. Talks are presented for all levels of interest and even if a particular talk seems to be "over your head" it is amazing how much will rub off by just listening and paying attention.

DOVE -

While writing this column, I just heard DOVE (Digital Orbiting Voice Encoder) make a pass by my QTH. By itself this is not remarkable. What is remarkable is the effort that Bob McGwier, N4HY, and others have put into the most recent attempt. DOVE unfortunately does have some hardware problems that have made it difficult achieving it's original goals. Software work arounds have been developed for most of these problems and tonight's pass was the first pass after the most recent reload of DOVE software. With any kind of luck, Bob and others on the recovery team should be able to upload the new Voice Synthesizer software within the next week or two. Hopefully, you will be able to hear DOVE speak on 145.825 Mhz FM by the time you read this column. Remember, DOVE, is one of the "Easy Birds" and can be easily heard with a two meter HT and a "Rubber Duck." When not transmitting Voice, DOVE will transmit conventional 1200 baud, AFSK, AX.25, Packet Radio. This "bird" should become the most accessible source of bulletin information, Keplerian Data, etc. that we have.

Loading of the Kernel Software in DOVE is currently accomplished by a very painstaking manual method. Two operators (Bob and his wife on most recent attempts) send a line of code to DOVE on two meters and listen for an "ACK" on 2.4 Ghz, then repeat this process manually until approximately 32K of code is loaded. This takes extreme patience under normal circumstances. In the case of DOVE, the "ACK" modulation on the 2.4 Mhz downlink is almost imperceptible due to a problem with the 2.4 Ghz transmitter. On top of this, imagine a signal that drifts approximately 100 Khz in a 12 minute pass due to the Doppler Shift at 2.4 Ghz. Do you get the picture? Fortunately, if things go per plan loading of the remainder of the software and operational files can take place over the two meter uplinks and downlinks under normal computer control. Let's keep our fingers crossed and thank Bob and the DOVE team for their efforts.

GENERAL -

These are already exciting times in the "World of Amateur Radio Satellites" imagine what is in store for us if even half of the new birds mentioned at Surrey this year get to orbit. We may see the time soon when there will be some kind of satellite in view at all times. We are not far from that now, and there are times when I have seen as many as five Amateur Satellites in view at one time.

New equipment is coming on the market to make entry into the satellite business easier. I have recently had the opportunity to operate some of this equipment during Field Day, at an upgrade in my shack, and reviewing some new offerings for future issues of AMSAT JOURNAL. The new "bells and whistles" are nice but not necessary for enjoyment of the "birds." Of course if you are a gadgeteer at heart, there are plenty of things out there to satisfy your urges.

Join AMSAT and help support this fascinating branch of our hobby. Move up in frequency and join the satellites and other VHF, UHF, and Microwave activities to show activity on our valuable VHF, UHF, and Microwave bands before WARC '92. We will need all the help we can get to hold these frequencies.

73 - Keith, W5IU

CHAPTER NEWS

Leo Meyerson Greater Palm Springs Ch 154

Don Doughty, W6EEN
42-6-5 Byron PL, Bermuda Dunes, CA 92201



Changing of the Guard in Palm Springs: Jim Bruner, W6CDK out going President of the Leo Meyerson Chapter #154 hands the gavel to incoming President Don Doughty, W6EEN, while Jerrie Stonier, K6INK incoming Treasurer and Stoney Stonier, WA6PEX incoming Secretary look on. Tip Tippey, W4DBG, was installed as Vice President

BALTIMORE CHAPTER 20

Bill Greene, WA4GHU
13892 Sunnybrook Rd, Phoenix, MD 21131-1342

Chapter 20 held its annual dinner meeting at Snyder's Willow Grove Restaurant in Linthicum, MD, May 3. The following were elected as officers for 2 year terms - L-



R in the picture below they are:

William F. Gatton, W3QFF
Lee Dorsey, N3BHC
Willar M. Greene, WA4GHU

President
Vice President
Scty/Treasurer

Jim Gurgick, W3DIT was cited for having received his 55 year certificate recently. The program featured a talk by Lewis J. Flaig, recently retired from Westinghouse - his

story was a fascinating preview of things to come. Then came a talk by our own Heru Walmsley, W3WV, about ATV and describing his own activities in and on into current developments. He demonstrated ATV transmitting and receiving equipment which he had built. Heru is an active member of the Baltimore Radio-Television Society and is another Westinghouse retiree, now actively involved with the local Westinghouse Electronics Museum located near the BWI Airport

Our next social event is the annual fall cook-out at Cam, Maries place on October 5. Our monthly lunches continue as announced on the weekly QCWA 2M net, Monday nights at 9PM on 147.285/685

CENTRAL COAST CHAPTER 75

Dave Kreiss, W6ELH
628 E Alvin Ave - Santa Maria, CA 93454

At the Chapter's spring meeting, May 18, 1991, our Vice President Boyd Benham, W6RPI provided an excellent program for a group of 54 members, friends, visitors and spouses.

The program was presented by Al Guy, KB6J who has a large collection of antique AM and AM/FM radios. The program included an illustrated talk with many slide pictures of his collection and four radios on display in the restaurant lobby. Displayed were: Radiola Superhet (1924) Philco Cathedral (1934), Mission Bell (1937), Silvertone (1941)



Following the program election of officers for a two term was held. Those nominated by the Committee were approved and

CHAPTER AND LETTER

the new officers are:

Dave Medley, KI6QE	President
Len Cummings, W6RBB	Vice President
Ed Glembotski, K6SAR	Treasurer
Dave Kreiss, W6ELH	Secretary
Harriet Amborn, N6HA	Historian

All attending enjoyed the excellent meeting and the information presented by QCWA Area 6 Director, Bob Rickey, NF6P, and our ARRL SM for Santa Barbara area, Tom Gelger, W2KVA. Our second luncheon of the year will be held in the 4th quarter of 1991.

Pictured above, L-R are: Al Guy, KB6J and Dave Medley, KI6QE.

LETTER TO THE EDITOR

After reading W5EJ's editorial in the Summer edition of the QCWA Journal, a friend remarked that the tone was pessimistic if not downright alarmist. I replied that the article was probably not alarmist enough.

The recent field tests conducted by the FCC to observe amateurs operating should indicate that something's up. Any amateur-related activity carried out by the FCC runs counter to the Commissions's policy of benign neglect with regard to the amateur service. This hands off policy is officially known as deregulation: The thrust of Ted's editorial concerned possible reduced power output. This is a distinct possibility in light of the persistence of RFI problems and a bureaucratic mentality that concludes it's less costly to eliminate the effects of a problem than it is to attack its causes.

Any policy dependent upon "good will" and "self policing" is suspect to begin with. It doesn't work, and if you disagree, listen to the "good will" being exhibited by the rough and ready crowd on 20 meters or the outpouring of profanity and obscenity on 75 any night of the week. I think we will have to view the FCC as being merely an administrator and not the protector of amateur radio. Subjected to pressure from Congressmen whose constituents complain about RFI or an Administration that just might be willing to auction off electromagnetic spectrum to raise cash to reduce the federal deficit, the FCC will do whatever it considers to be in the national, not amateur interest. In his editorial Ted suggests that the Commission considers amateur radio an anachronism -- a service that has outlived its usefulness. I agree with his analysis. But I also feel there are some practical steps we can take to make the FCC dance to our tune for a change, or at the very least be aware that they can't change the song because they don't like the music.

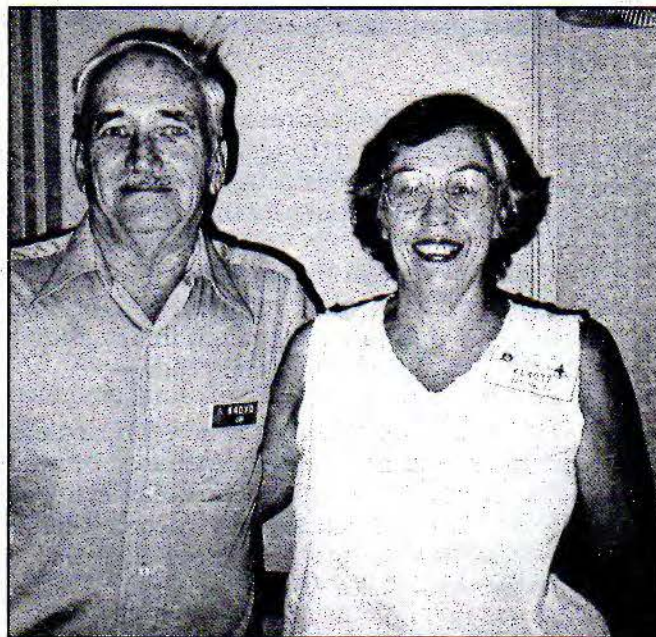
For the first time since former U. S. Senator Barry Goldwater championed amateur radio in Congress some years ago, several U. S. representatives and senators have taken up our cause. I'm referring to the Amateur Radio Spectrum Protection Act of 1991, HR73 and S 1372. Material on the proposed legislation appeared in the

August 1991 issue of QST.

Passage of a radio protection act will not only preserve our bands, but also send a loud and clear message to the FCC. Recognizing that Congress is interested in the Amateur may very well prevent the FCC from taking further actions to erode operating privileges. The first step in this process begins with our taking the time to write a short note to our U. S. representatives and senators.

Dan Davis, W8LUX
1072 Snyder Rd, East Lansing, MI 48823

CHAPTER 107



Pictured above, Lou and Rose Porter, K4OVQ AND KC4OTI, Husband and wife team members of Chapter 107!

F. C. J. SPIKE, W7OS - Silent Key

Eugene H. Dodge, W7BTV (1230) of Gig Harbor, Washington wrote to us on June 12, 1991, reporting the passing of Pioneer Doc Spike, W7OS! The following are his words:

Dr. F. C. J. Spike, W7OS was both one of the founding fathers of the Radio Club of Tacoma and founder of the Northwest Chapter 4 of QCWA, along with Charles Emigh, W7ER who passed away several years ago. I met Doc when I was about 13 years of age, before I had an amateur license. He was the second amateur I had the pleasure of meeting. The first was Karl Weingarten, W7BG who was then NW Division Director for ARRL. We became very close friends and remained so until the end. My first meeting with Doc took place in the late 1920's shortly before I received my first license in 1931.

It is with love in my heart and a great deal of sorrow that I pass this information to QCWA members. All amateurs in this area will miss him - he meant so very much to all of us.

INTENTIONAL QRM

PROCEDURE FOR INTENTIONAL INTERFERENCE MATTERS

M. L. Gibson, W7JIE
1215 N 28 Pl, Renton, WA 98056

I. In preparing for FCC to take action on "proven intentional" and recurring amateur-to-amateur interference problems, the following procedure has received unofficial approval:

a. A listing of monitoring equipment used. Name, Model, antenna(s), and anything else which will prove that equipment used was technically suitable for the job

b. Names, calls, addresses and phone numbers of volunteers making the tests and report. Amateur, commercial or professional licenses held by each. Technical qualifications for the tests carried out

c. Times, dates, frequencies, and locations where signals were detected, recorded and/or DF'd. No "guess work" and provide enough information to verify the quality of your tests and report.

d. Where possible record on standard cassette equipment the on-the-air transmission, interference, or signals causing the problem being reported. Note times and dates of each recorded occurrence. Several recordings help prove it is not an occasional problem

e. In all cases be sure that a "paper-trail" is established. That is, note anything pertaining to the detection, recording, direction-finding, locating, addresses, times, operators and calls, signal strengths, spectrum-analyzer readings, and anything else that might help pin down the case. You cannot have too much information on paper for an iron-clad case.

f. Do not enter any opinions, guesses or other technically unsupported information. It may kill the case most of the time and does not contribute to solutions

g. Keep couple of copies of your work just in case the mail fails or the whole thing gets lost

h. Don't try entrapment. That means you do not bait the station in order to get it on the air. Do not call the station or in any way cause the station to make transmissions so you can DF it's location. Just take measurements on signals as they occur. "Entrapment" will void all the work of the search team. If someone not on the team makes such transmission,

that cannot be controlled

2. Contact your local ARRL Section Manager, Official Observer, Coordinator, or an FCC Amateur Auxiliary station for preliminary help in setting up the action. They can provide guidance during your work. Us them to keep things in line. They can help you present your case to the FCC. Remember, the FCC will only take action when presented with FACTS! Once the FCC has taken the case your continued follow-up is only required if requested by the FCC. Be patient - don't lose your cool! Remember, the FCC has lots of vital work besides looking for amateur jammers. Work with them. Don't call the FCC until you have all of the needed data and reports ready and then only with the Amateur Auxiliary coordinating the process. The FCC is last in the action!

Editors Note: This procedure appears to be one way to go - it has been checked with local FCC officials who informally subscribe to the methods outlined. Thanks go to Gib, W7JIE for his efforts. .

ALL BAND SLOPER



MISCELLANEOUS

ONE BROADCAST ENGINEER TO ANOTHER

George Brooks, W2GX
486 River Rd, Newburgh, NY 12550

Dear Ted:

Your comments in the Summer 91 Journal on power reduction and FCC brings to min a comment made by an attorney in Washington Law Office - his comment being "We have the best FCC Commissioners that Money can Buy". Was reading the November, 1978 Broadcast Programming and Production on a piece of about AM Stereo written by Don R Werrbach, and a name jumped out of the text. It was yours. Don was talking about antenna conversion and says, "according to Ted Heithecker, a field engineer with the Consulting firm of Earl Cullum and Associates, who disussed the problem over coffee with the author. They had gotten into a three-way discussion with retired supervising engineer at WBZ in Boston and the Chief of one of Boston's AM stereo stations on 75 metere phone. and I had wanted to refresh my memory on stereo. WBZ had one of those original Westinghouse 50 HG-1, 50 kW transmitters, as did WHDH and WTIC. I know engineers in all three stations where they replaced that transmitter with either Continental or Harris 50 kW jobs..but left the old Westinghouse for an alternate/spare. Without exception they all say the new transmitter sounds cleaner, but the Westinghouse sounds more solid! It had guts!

On May 16, 1991, George N. Dunbar, Jr, became a Silent Key. George spent the last few years of his life in a retirement home, but was still active until a few days before his death. I knew George for many years and if ever a person deserved the title of "Gentleman" it was George. - Guess that's all the hen scratches that this RI can write today.!

Jim Gundry, W4JM
290-8 Forestgreen D, S, LKakeland, FL 33811

Following is a letter, quoted verbatim, from Jim, to the SE Director for the ARRL regarding 40 meter allocations. He has some novel thoughts, read them and then comment.

To: Mr. Frank Butler, Jr, W4RH
ARRL Director, SE Division
323 Elliott Rd, SE, Ft Walton Beach, FL 32548

Dear Frank:

"I've been in ham radio since 1930 and fondly

recall the halcyon days of 40 meters when it was free from commercial QRM and jammed with ham signals from end-to-end. Along with many other aims I hope that WARC 92 will bring about a better situation for amateur radio worldwide.

I believe that greater occupancy of 40 meters between now and WARC 92 is one key to protecting what we have and possibly gaining a shift to a commercial free band. Do this and I offer the following suggestion for re-allocation and on a priority basis:

7000-7015 KHz	CW, RTTY & data	Extra Class
7015-7075 kHz	CW, RTTY & data	General Class & up
7075-7100	kHz CW & Phone	Extra Class
7100-7150 kHz	CW, RTTY & data	General Class & up
7150-7175	kHz CW & phone	Advanced & Extra
7175-7300 kHz	CW, Phone and Image	General Class & up

Move novice operations to the 10 MHz band in lieu of 40 meters.

It is also my belief that US phone operation 7075-7100 kHz will encourage more foreign operation on 40 meters and that will be another plus at WARC92 that the band is being used by the amateur service.

I strongly recommend that the League petition the FCC to immediately revise the allocations on 40 meters per the above. I think ham radio will benefit tremendously by such a move.

/s/ Jim Gundry, W4JM
Assistant Director, SE Division"

Leland Smith, W5KL sent this cut to us as a joke, and pointed out that it might be fun to run in the Journal. Turned out he was right. This was published in the Scimitar Temple "Blade" for April, 1991.



CHAPTER NEWS AND REPORTS

MICHIGAN STATE CHAPTER No 10

Curran Skutt, W8FSZ

410 E Holland Lake Dr, Sheriden, MI 48884

There were 52 hams with a total of 2,243 years and their guests present for the annual dinner meeting at the waterfront restaurant in Caillac, MI on May 18. The meeting was called to order by W8HZE, ED Ireland, President. The minutes and treasurers report were read and approved. The subject of a mailing regarding meetings and other important events was again raised. A motion was made by Polly, W8FLA to establish a general fund for this purposes. A collection was taken and \$51.75 was a starter for the account. There were two 50 year certificates given; Donald Chistensen, W8WOJ and JOHN WARMUTH, W8BP received them. There was one present with 60 years and three who had 60-70 years. Two members had been licensed in 1923.



In the picture above, officers for 1991-1992 are shown, L-R are: Orrion Skutt, W8FXZ, Scty/Treasurer; Doon Christensen, W8WOJ; Pat Guthrie, K8TSO; Francis Gary, W8GJH.

Winchester, VA on I-81 we have had a number of visitors at recent meetings. The Holiday Inn, where the Chapter meets, is a few hundred yards east of I-81 at Exit 80. Remember, we meet the 3rd Wednesdays of Odd-numbered months at 6 PM!



Pictured above, L- R are: Roy Cartier, K4AC presenting the Golden certificate to Nate DeGutz, W2CXB.

CENTRAL NEW YORK CHAPTER 28

George A. Decker,

15 Cornish Ave, Binghamton, NY 13901

During the Fall and Spring seasons the Chapter has held several informal luncheon meetings. These have been held at the "Red Lobster" in Vestal, NY and, at the "Rusty Nail", in Cortland, New York. A recent innovation has been our door prize drawings and they have sparked many favorable comments from those attending. Attendance has been averaging about twenty members and guests at each meeting.

SHENANDOAH VALLEY CHAPTER 137

Guy Black, W4PSJ

1201 Woodside Dr, Winchester, VA 22601

For the first time in years the Shenandoah Chapter had to cancel its bi-monthly dinner meeting due to a sudden heavy snowstorm on January 16th, that delayed the installation of Roy Cartier, K4AC as the new Chapter President until the March 20 meeting. Ed Rich, K3THD, remains Vice President and myself as secretary/Treasurer. Following that ceremony, Chapter member Dave Burns, WA3WHR, spoke on the early days of aeronautical communications and of his personal experiences as an airborne ham and commercial airline pilot. At the May 15th meeting, Nate DeGutz, W2CXB was presented with a certificate honoring him for his 60 years as a ham. The May program was a video prepared by Adrian and Hugh Kingsford of Mapua, New Zealand of still, motion photography and ATV from radio-controlled model aircraft. This video is available from R/C World, 1403 Bayview Dr, Hermosa Beach, 90254.

Because so many QCWA members travel through



Chapter membership and financial records have now been computerized and this should lead to more accurate and efficient Chapter operation!

CHAPTER NEWS AND PROBLEMS

AUSTIN CHAPTER 67

Roy Miller, W5FOZ

3202 Silverleaf Dr, Austin, TX 78757-1613

The Austin Chapter met July 20 at Wyatt's Cafeteria in Hancock Shopping Center. About 30 members, xyls and guests were present. The program was presented by one of our new members, Bob Logan, NZ5A. His subject was Friends in Ham Radio. In other action shown here, Roy Miller, W5FOZ, at left was presented his 55 Year Gold Certificate by President Curtis Goodson, W4QBU, at right.



The Austin Chapter #67 meets the third Saturday of every odd month at 11:30 AM, at Wyatt's in Hancock Center. Visitors are welcomed!

YORK COUNTY CHAPTER 165

William H. Boyer W3AMQ

21 South Findlay St, York, PA 17402

Pictured above are 12 members of York Chapter who were present at the Chapter 165 meeting held June



22, 1991, at Eastern Hembock Pavillion. Ten XYL's were also in attendance. In the picture (lower left) L-R, front are, Denny Cooper, K3NVI; Bill Boyer, W3AMQ; Paul Stumpf, W3AQN and Elmer Hauer, W3IXWQ. Rear row, L-R are, Ray Shaub, W3AXC; Bill Barefoot, W3UQJ; Frank Bair, K3GDI; Yoyal Gibson, W3LUD; John Shaffer, W3SSB; Bill Steinfelt, K3SRP; Ed Kirby, W3YQJ; and Pete Chantilles, N3DVO.

Preceding the meeting a covered dish luncheon was held for all to enjoy.

ENGINEERING PROBLEMS

We had planned and promised to go into beginning algebra, and some work with complex numbers. We apologize for the change, brought on by unforeseen circumstances. Perhaps we can do that again, in the future. We have set down a few simple problems in this issue, and if all goes well, the answers will appear in the Winter QCWA Journal. At any rate, the engineers section got short circuited this time - we simply did not have enough time to work out a series of problems together with answers for this Fall QCWA Journal. We have put together a few problems that will keep you busy for a while, unless you are dealing with such work regularly. Here's hoping that you enjoy working with them. They might make you dig out some text books to get a forgotten formula!

In this series basic information is, we have a piece of 50-ohm transmission line, 20 feet long, having a propagation factor of 0.77C. We will ask you to determine the SWR and load impedance appearing at the input end for each of the three conditions that are listed below at an operating frequency of 3500 kHz:

The line is terminated in three different loads.

- a 25-ohm non-inductive resistor
- a complex load of $50 - j30$ ohms
- a complex load of $100 + j50$ Ohms

We'll have the answers for you in the Winter Journal. Watch for them. Send your answers to W5EJ.

CERTIFICATES AVAILABLE

MEMBERSHIP CERTIFICATES numbered in serial order are issued to each member. Numbers are not re-issued except to the same member to whom they were first issued

QCWA GOLD CERTIFICATES celebrate the 50th anniversary of licensing. Issued without charge to eligible members upon proof of year of first license

GOLDEN CERTIFICATES, are issued in five year increments - 55, 60, 65, 70, 75 year Certificates, free of charge to eligible members.

50-YEAR CONTINUOUS LICENSING Gold certificate available to eligible members. Requires submission of proof licensing. There is a \$5 fee. Applications available from QCWA Headquarters.

QCWA CENTURY CLUB CERTIFICATE is issued to QCWA members whose age, when added to their number of years as a QCWA member, totals 100 or more. No charge for the Certificate

MERITORIOUS AWARD is issued by Headquarters, upon request of any active QCWA Chapter. One such award for each Chapter each year. The Award may be given to recognize unusual dedication to QCWA or Amateur Radio. There is no charge for the Award.

OPERATING AWARD CERTIFICATES

QCWA Operating Award Certificates are issued to QCWA members by the activities manager. Proof of eligibility is required.

QCWA WORKED 50 STATES awards are issued to QCWA members who have contacted members in each state of the Union.

QCWA WORKED 100 MEMBERS awards are issued to QCWA members who have contacted at least 100 QCWA members

QCWA WORKED 60 CHAPTER awards are issued to QCWA members who have contacted members of 60 chapters

QCWA WORKED 500 MEMBERS awards are issued to QCWA members who have contacted 500 QCWA members.

In addition, plaques are awarded to the highest scoring members for both phone and CW QSO Parties. Runners up receive certificates.

MEMBERSHIP SUPPLIES & ORDER BLANK

QCWA Lapel pins, gold plated, with call engraved, tietae, safety-pin or screw type. These pins do not have year tags!

QCWA Lapel pins, gold plated, call engraved, with year tags.

Specify year (25,30,35,40,45,50,55,60,65,70,75) Clutch type only

All pins, each	\$ 10.00
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QCWA embroidered emblem	\$ 5.00
270 QCWA Red stamps (regular)	\$ 2.50
270 QCWA Gold stamps (Life)	\$ 2.50
240 QCWA Yellow Stamps (50-yr)	\$ 2.50
QCWA Logo on rubber stamp	\$ 6.50
QCWA Cap with Logo	\$ 5.00
QCWA Chapter Banner	\$200.00
QCWA pays half of first banner	\$ 100.00
QCWA Decals	\$ 1.00
QCWA Vest, get order blank from Headquarters	\$ 25.00

To QCWA, Inc., 1409 Cooper Dr., Irving, TX 75061, please ship

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Volume 40, No. 3

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